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# MARYLAND FARMER AND MECHANIC:

DEVOTED TO

Agriculture, Horticulture, Rural Economy & Mechanic Arts.

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## HINTS ON COUNTRY HOUSES.

### Number Ten.

#### Suburban Villages and Country Cottages generally.

In our last number we dwelt on the use of stone as a building material for country dwellings, not only on the score of economy, at the present price of lumber, but also because of its durability, and because, likewise, its color harmonizes with the landscape. We are not going to enlarge upon this subject, except incidentally, and with reference to a class of suburban cottages that is much needed in the neighbourhood of large cities, and which, in consequence of the high rents now asked for houses of moderate dimensions, within the limits of our crowded streets, would, we are confident, command ready tenants. Let us examine into this matter a little. Wherever the suburbs are penetrated by horse railways, or where steam railway facilities are to be had at cheap rates, there is a class of our population composed of men of moderate means and of economical habits, who would gladly exchange their narrow and pent up dwellings in the city for the free air and larger liberty; and the enjoyable quiet to be found in rural districts within a mile or two of the city limits. The distance should not be too long for a walk, nor should the cost of riding, if by horse or steam cars, be a matter of much more serious expense than would be incurred in riding from one portion of the city to the other. The difficulty in the way of inducing persons to exchange a city house, with all its annoyances and inconveniences, for a cottage in the country, arises from the absence of cottages adapted to the popular requirements, and perhaps, from the want of society, which, to those accustomed to city life, is an essential condition to their enjoyment of the country. These objections can be obviated however, and as an illustration in point we might refer to the suburban villages around Boston, or, better still, to the villages in close neighborhood of the larger English cities. Every body who has travelled in the latter country knows that these villages are the cosiest, prettiest and most

comfortable collection of houses imaginable. Whether the houses are in close proximity to each other, or are of more pretension, and stand in their own grounds, they are, for the most part, the very *beau ideal* of what dwellings in the country ought to be. They have their little front yards, ornamented with flowers, the walks laid off with box edgings, and the walls of the houses themselves have the natural ornamentation of running vines and roses. In the rear are gardens of a size sufficient for the cultivation of all the fruit and vegetables that the family requires. These cottages are solidly built, principally of brick—never of wood—the latter fortunately being much dearer than either brick or stone, and it is, therefore, only used in those parts of the building in which its adoption is absolutely required. On the score of architectural taste, but few of the cottages have much that is worthy of commendation; but on the score of neatness and rustic beauty, nothing could be more charming or better adapted to the wants of the people. What they lack in regard to tasteful construction is amply compensated for by the natural adornment to which we have already alluded. Flowering vines, clambering over the porches, running up the sides of the houses and draping the windows—beautiful when in full leaf and still more beautiful during the season of flowering—these adjuncts, so simple yet so appropriate, impart an attractiveness to the humblest of cottages, which neither window hoods nor elaborately cut drop work, nor all the decorative contrivances of the builders could possibly give.—We cite these instances because they are applicable not only to semi-suburban villages and cottages among us, but also to villages and cottages every where throughout our rural districts, and whilst we believe that a happy change would be effected in the comfort of those families which are paying high rents in crowded cities by the construction, in the vicinity of our cities, of cottages, either singly or in blocks, adapted to their means; each with its own garden and neat front yard; we have also an abiding conviction that villages and small towns



more remote from our commercial centres might, in a similar manner, be rendered far more attractive to their inhabitants. We want to see their long straggling streets embowered in shade trees—their houses all well back from the side walks—their front yards beautified with flowers and ever-blooming roses and vines—honeysuckles wreathing the porches, and covering with their graceful drapery the walls of every dwelling. Finally, we want, and we hope yet to see, less wood and more brick or stone used in the construction of our country houses, whether small or large; whether mansion, grange or cottage; believing, as we do, that the solidier material is the cheapest in the long run; that economy of fuel alone, in the winter season, would of itself be a great saving; that their comparative coolness in summer would add very sensibly to the comfort of the indwellers, and that the air of permanence which these solidier structures present, would foster that sentiment of local attachment which, with us, has hitherto been but imperfectly developed.

#### The Farmer's Paper.

In the course of his remarks at the complimentary dinner and presentation to Sandford Howard, Esq.; Dr. Geo. B. Loring paid the following compliment to the editors of the agricultural press, while speaking of its agency in the improvement of our husbandry:

"The farmer's newspaper is, in our country, almost the sole guide of the farmer's labor. It has thus far performed the part of college and teacher. It constitutes a large portion of the literature of that profession which all men love, and upon which all men depend directly or indirectly for subsistence—in its pages, a common ground, where all conflict ends, a platform upon which all can stand, a creed which all can believe, and who does not know the reward and praise and satisfaction, with which the unhappy voyager across the stormy surface of a partizan press, finds repose in these columns, which reminds him of the calm and steady and luxuriant promises of nature—of growing crops, and of animals devoted to the 'services of man'?" and more, who does not know that whatever progress has been made in agriculture has received its stimulous and direction from these same columns. By suggestion, by investigation, by records of experiments, by statements of successes, has the agricultural newspaper press of our day kept the agricultural mind stimulated and informed. When larger and more ambitious designs accomplish in a more imposing manner, what the agricultural editor is quietly doing every week, we shall be sure that something positive is done in the way of agricultural education."

You may know a foolish woman by her finery.

## ELEMENTS OF LANDSCAPE GARDENING.

### Number Ten.

#### Entrances, Entrance Gates, Roads, Wire and Woven Fences.

As the entrance way to a place, of even moderate size, is the first feature that attracts the eye; its selection, wherever a new one is to be formed or an old one is to be changed, is a matter of no little importance. A mean entrance way detracts more from the real beauty of a place than persons not conversant with the fact would imagine; whilst a bold sweep, at a point judiciously chosen on the main road, gives at once character to the ground and distinction to the dwelling to which it leads. A straight avenue is always stiff, formal, and ugly, and should be avoided. A curved line is the best, with the ground gradually rising as the house is approached. A descent from the main road to the house has invariably a bad effect, and should be shunned whenever it is possible to do so. In choosing a site for the entrance way select, if such can be had, a turn in the main road, and so arrange the approach that it shall be at right angles to the road. After curving the lines leading from the public road to the gate to suit the locality, plant the gate posts at right angles to the carriage way, and start off from thence with an easy sweep. If there are no trees where the entrance is situated, plant a number tolerably close together in the hollow of the curve at each side of the gate; mingling shrubs and evergreens with the deciduous trees. In continuing the road from the gate to the house, unless the distance is greatly increased, let it follow the conformation of the ground wherever it is rolling, and, even if it should present an entirely level surface, the road should wind within an easy grace from the point of departure to that of its termination. In places of small dimensions, and where the road runs through dressed grounds, evergreens and shrubs may be massed at intervals along the sides of the road with a very pretty effect; taking care to plant the heaviest masses at the curves and to connect them with smaller groups running off into single specimens. In the construction of the road itself much will depend upon the nature of the soil and the character of the dwelling; but whenever the owner can afford the expense, and the distance is short, the road should have a solid bottom of broken stone, and should be blinded with gravel kept hard and firm by the occasional use of the roller. Such a road when once well made will last for many years, and will give character and neatness to the grounds through which it passes.—With regard to the entrance gate, it should not be less than ten feet wide; should be sustained by stout posts deeply and firmly set, and, in its construction, should be solid rather than pretentious. Small

side gates for foot travel add greatly to the effect and allow of a larger width of roadway; but where the dwelling is of moderate size, and the property itself is small in extent, they would be altogether out of place. It is a fault of what may be styled the better class of our modern gate entrances that they are too elaborate. They are, for the most part, not only too slight in point of construction, but are also disfigured by excessive ornamentation. Gates, and gate posts, should be plain but massive, and should correspond, as far as may be, to the character of the dwelling to which they constitute, as it were, the outer portal. A flashy gateway, no matter what may be the style and dimensions of the house beyond, is essentially vulgar and in bad taste. Of decoration, except on the caps of the posts in the shape of a globe, or of simple moulding, there should be none whatever. We have tried to accustom ourselves to the gates which modern ingenuity and skill have constructed of iron frames filled in with a network of thick wire; and whilst we admit that although they are slight in appearance, they are not liable to warp or to shrink, as is the case with gates constructed unskillfully and of unseasoned wood, we cannot be brought to like them. When suspended between heavy posts, they have a flimsy and gossamer look about them that is entirely out of accordance with their surroundings, and, for this reason alone, if for no other, they are ill suited to the uses to which they are part.

The same objection, but to a far greater extent, may be urged against the use of wire for fencing, wherever single strands of wire are used. At a little distance the wire is not visible at all, and the eye rests upon what is apparently a continuous row of naked posts which seem to enclose nothing, and which look as if the land owner had commenced the work of building a fence and after setting the posts had neglected to put on the panelling. Fences made of woven wire, stretched between posts eight feet apart, strengthened by a bottom plank, from eight to twelve inches broad, and finished off at the top by a narrow plank of a breadth of from four to five inches—thus enclosing the wire, as it were, in a frame work of wood, of which the wire forms a net work panel—are, on the other hand, as useful for small places, and for dressed grounds, as they are really ornamental. The nakedness of the old style of wire fence is thus avoided, and the entire structure is as perfect, as an enclosure, as it is satisfactory in its completeness.

A CONNECTICUT farmer has discovered that his cows have been regularly milked by black snakes, who took occasion to attach themselves while the cows were reposing in the fields. Many snakes have been thus caught and killed.

## Our Agricultural Calendar.

### Farm Work for October.

As the long drought has doubtless prevented many of our farmers and planters from completing their labours preparatory to the seeding of wheat, we respectfully urge all those who are yet behind hand, to push forward the work with as much despatch as is consistent with careful ploughing and a thorough pulverization of the soil. It is now pretty generally conceded that the best time for planting is from the last week in September to the 10th of October, and not later than the 15th, if it can by any means be avoided. The earlier the seeding takes place the better chance there is for the young plants to take good root hold before the hard frosts set in. With the present scarcity of field hands we cannot advise that large crops should be pitched. It is far better to cultivate a smaller area and to concentrate upon this more limited space all the manure or fertilizers that can be spared for the purpose. The increased product will be more than an equivalent for the diminished extent of land—the work to be done can be better performed, and the land thus improved will be left in good heart for the succeeding grass crops. With these few remarks we take leave of this important subject for the present, and note down, as usual, our suggestions as to the work which demands attention during the month.

#### SEEDING TO WHEAT.

We have already offered such suggestions in regard to this important crop as may be considered most desirable, in the September No. of the *Farmer*, and to those remarks we refer our readers. We may state here, however, the chief points to be observed. The best soil for wheat is a heavy loam inclining to clay. It should not be too rich, as the wheat would be inclined to lodge, and would also run the risk of suffering from rust. It should, nevertheless, contain all the constituents for the production of wheat or the product will be proportionably lessened.—Where manures or fertilizers are wanting those that abound in the phosphates are the best, although a small supply of nitrogen is likewise essential. It is the phosphates, however, that increase the production of grain; the nitrogen acting to a much greater extent on the straw. Deep ploughing and thorough tillage are among the primary conditions of success. The land should have a dry subsoil; and wherever water is liable to stand, it should be carefully drained off by water furrows. Drilled wheat stands the winter better than wheat broadcasted, and will generally produce a larger yield of grain. When drilled, five pecks to the acre is sufficient; broadcasted, it requires two bushels.



**R Y E .**

This crop should have been seeded in August, but a fair crop may be raised if the seeding takes place before the 15th of the month. Much, however, will depend upon the character of the season. If the frosts set in very early, late sown rye will not do well. If, on the other hand, we have open weather, it may still be raised to a profit. But early seeding of rye is always advisable, and it is only under stress of circumstances that late sowing should be resorted to. If it should so happen that the seeding has not yet taken place, the growth of the young plants should be stimulated by a good dressing of barnyard manure. The quantity of seed required to the acre is usually five pecks—but when the seed is put in late a bushel and a half would not be too much.

**Management of Hogs.**

The high price now paid for pork will justify increased attention in the management and fattening of hogs. Their pens and sleeping apartments should be kept perfectly clean. They should be well and regularly fed with slops and the refuse of the farm, mixed with a small quantity of corn meal—and as the fattening process progresses the quantity of meal, or corn, in the ear, should be increased. During the last three weeks of the fattening the hogs should be fed upon corn or corn meal exclusively—the latter being by far the more economical. They should invariably be fed three times a day, and should be provided with a trough in which there should, at all times, be kept a supply of charcoal, rotten wood, ashes and salt, as this mixture is found of great advantage in promoting digestion. The principal points to be observed in fattening hogs are, that they should be kept clean by constant renewals of litter—warm by abundance of straw in their sleeping rooms, and well and regularly fed, as already advised.

**Littering Cattle Yards.**

Seize every opportunity to collect all kinds of rough vegetable material, and haul it into the barn yard. The scrapings of ditches, the turf of hedge rows—woods mould, and leaves, these with refuse straw haul in—the ashes and wash water from the house, should all be gotten together. When mixed with barn yard manure and well saturated with urine, they will become, by the time spring opens, equal to the best barn yard manure.

**Cattle Sheds.**

Every cattle yard should be partially enclosed with sheds having a southern aspect, for the protection of stock during the winter. Attention to this will more than pay the interest on the cost of the sheds annually, in the lesser amount of food required to keep the stock in good order.

**Pumpkins and Roots.**

These should be gathered and stored away in a dry place before the frost has time to injure them.

**Renovating Old Orchards.**

Old orchards may be greatly improved by spreading over the surface of the soil a compost formed of ten two-horse cart loads of wood mould, five of stable manure, five bushels of wood ashes, two bushels refuse salt, and one bushel of plaster. The above is sufficient for one acre. The compost should have previously lain in bulk for two weeks, or until fermentation has set in. It should then be carted out, broadcasted, and ploughed lightly under. Finish the work with the harrow and the roller. For the trees themselves, prune off all dead limbs and scrape the bark free of moss, wash it with soft soap and flour of sulphur, and the work is done.

**Draining Wet Lands.**

Wherever the lands lie wet, now is the time to have them thoroughly and completely drained.—The effect of draining will be to increase the temperature of the soil, make it more friable and easy to work, and will enable the plough to run deeper with less effort on the part of the team. Drainage, moreover, improves the health of a neighborhood and facilitates the action of manure on all soils that require it.

**Milch Cows and Calves.**

See that these are well attended to, and that they do not suffer for want of water.

**Working Animals.**

Feed these well. House them of nights; bed them regularly; and do not neglect to give them water twice a day.

**Buckwheat.**

Harvest and secure your buckwheat before the frost comes to cut it down. Take care of the straw as it makes good rough fodder for the stock.

**Fall Ploughing.**

On stiff clay soils it is of decided advantage to plough the land late in the fall, and suffer it to lie exposed during the winter to the action of frost.

**Shade Trees.**

Wherever a deficiency of shade trees occurs about the homestead, it would be well to plant out a number of young quick growing trees during the present month, and to intersperse them with flowering and other shrubs wherever the latter can be grouped with effect. As regards the proper method of doing this, we refer to the brief hints on Landscape Gardening in previous numbers of the *Farmer*.

**Setting out Young Orchards.**

Wherever a new orchard is required, let the ground that is chosen for this purpose be well manured with a compost similar to that already spoken of as of advantage in renovating old orchards. An addition of five bushels of bone dust would be of great advantage. After spreading the compost broadcast, plough the land very deeply, and subsoil it if the work can be done. Harrow and cross-harrow and finish off with the roller. The land will then be fit to receive the trees which should not be planted at a less distance than thirty feet apart.

## Garden Work for Oct.

There is very little to be said concerning the work to be done in the Garden during this month. With the exception of planting out cabbage for spring use, and providing the necessary protection for spinach, lettuce, and Brussels sprouts in the beds where they are to stand over the winter, the operations in the garden consist chiefly in working such vegetables as still require attention, and in cleaning off old beds and preparing them anew for spring use. The following matters are those that chiefly claim attention:—

*Spinach*.—Weed and thin out the young plants of spinach, so that they may stand from four to five inches apart.

*Lettuce*.—Prick out all lettuce plants that are of a sufficient size for transplanting. Let the bed where they are to mature be deeply spaded and finely raked, and at the approach of cold weather protect the plants with a covering of crust or light litter.

*Setting out Cabbage Plants*.—From the 10th to the middle of the month select the strongest plants from the seed bed to the plot of ground prepared to receive them. The latter should be dry and of a loamy texture. Spread over it the richest stable manure to a depth of three inches, and dig it in to the full depth of the spade, raking the soil well and completely pulverizing it as the work proceeds.—When this is completed throw the land into ridges—running east and west, three feet apart, as if ridging for potatoes. Pat down the sides of the ridges to keep them from crumbling, and when the whole of the ridges are formed, set out the cabbage plants six inches apart along the slope of the ridge, on the north side, and about half way down. Towards the close of November strew long straw or stable manure along the vallies between the ridges up to the line of the plants. In the spring, as soon as the soil is fit to work, break down the crest of the ridges into the vallies, and work fresh soil about the plants.

*Endives*.—These should be tied up for blanching, and have the earth drawn up around them.

*Cauliflowers and Brocoli*.—All of these as are expected to flower during the month should be carefully worked. The plants will need the protection of glass at night.

*Asparagus Beds*.—As soon as the haulm of asparagus begins to turn yellow, it should be cut down close to the ground. Clean off the haulm, weeds and grass; put the refuse into a pile, and when dry enough, set fire to it. Strew over the asparagus bed two inches of well rotted manure and a thick coating of refuse salt. Early in the spring give the bed another top dressing of a similar character, with the addition of a small quantity of wood ashes.

*Celery*.—Continue to earth up celery for blanching.

*Rhubarb and Sea Kale*.—Seeds of these should now be sown.

*Shallots, Garlic and Cheves*.—Set these out early in the month.

*Raspberries*.—New plantations of these may be made about the middle of the month.

*Gooseberries and Currants*.—Towards the latter part of the month plant out gooseberry and currant bushes six feet apart.

*Strawberries*.—Top dress the strawberry beds with a dressing of woods earth.

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How CORN SHRINKS.—A correspondent of the *Prairie Farmer* weighed out 75 lbs. of corn on the ear, dried it, shelled it; and on submitting it to the test of the scales again, found that the corn and cobs together only weighed 60 lbs., having lost 15 lbs. He thinks it did not shrink more than most corn will by keeping over winter.

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CHANGING PASTURES.—J. M. Conner, of Hopkinton, N. H., says, that in his opinion, "in many pastures where the water is situated so as to allow for dividing them into lots, and changing the cattle alternately, thus giving the grass an opportunity to get a start, would enable our pastures to keep a third more stock.

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COST OF KEEPING SHEEP.—The N. Eng. Farmer states that Mr. Elliott, of New Hampshire, estimates the cost of keeping sheep at \$1.50 per annum.—Each sheep would make a half a load of manure during the winter, besides the benefit done to the pasture by the droppings left thereon.

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ETERNITY has no gray hairs. The flowers fade, the heart withers, man grows old and dies; the world lies down in the sepulchre of ages; but time writes no wrinkles on eternity. Eternity! Stupendous thought! The ever present, unborn, undecaying, and undying,—the endless chain composing the life of God—the golden thread entwining the destinies of the universe. Earth has its beauties, but time shrouds them for the grave; its honors are but the sunshine of an hour; its palaces, they are but the gilded sepulchre; its pleasures, they are but as bursting bubbles. Not so in the untied bourne. In the dwelling of the Almighty can come no footsteps of decay.

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As the eagle dips his wings in the crystal spring, to beautify and strengthen them for his upward flight, so should the young go to the fountain of literature and science to adorn and strengthen their minds, that they may be qualified to rise to a sphere of usefulness in the world.



## CULTURE OF FLAX.

Through the agency of the rebellion, the subject of flax culture has become one of deep interest to the nation at large. No trustworthy estimates can be formed relative to the amount of cotton to be placed in the market for years to come. We are as yet uninformed as to whether or not the culture of cotton has been discontinued in the rebellious states. The hazards of war will doubtless prove fatal to a large amount already in store within the limits of the cotton States. As a substitute for the latter article, flax has arrested the attention of those conversant with that branch of business. Large amounts of flax have heretofore been raised merely to obtain the seed.

In Great Britain any article from a linen handkerchief to heavy duck can be cheaply made from flax. By the official reports, it appears that one hundred millions of capital are profitably invested in the spinning and weaving of flax and hemp fibres in the British Empire. That country runs one and a half million of spindles, whilst the United States had but fifteen thousand in 1862. In view of the great importance of this crop we offer to our readers the following on

## FLAX CULTURE—BY WILLIAM NEWCOMB.

*Soil and Situation.*—The first requisite in flax growing is to have a good soil, in a suitable situation. On the alluvial soil on the banks of rivers or smaller streams, flax will not succeed. Mildew or rust almost invariably destroys both the seed and stem, or hurl. All high or elevated lands that will produce good corn, if not sands, will produce good flax with proper cultivation. Flax does not succeed well on a sward ley, but ought to be sown after some hoed crop of the previous year. It does not bear manuring with barn-yard manure the season it is sown. The seed must be good and free from fowl seeds.

*Preparing the Land and Sowing.*—The land can scarcely be too finely pulverized before sowing. If plowed when wet no after cultivation can remedy the evil. The earlier the land can be plowed, after it is in a suitable condition, the better prospect of a good crop. Drag or harrow the ground thoroughly before the seed is sown, and as lightly as possible, and only once after it is sown. The heaviest crop I ever raised was in a sixteen acre lot, which was not dragged at all after it was sown, but washed in by a heavy shower and continuous rains for several days until the seed had sprouted.

There are several rules as regards the time of sowing flax seed. One of them is, when the forest trees begin to put forth their young leaves. Another is, the first week in May. But the safest rule is when your soil is in good condition to work, and the

danger from severe frosts has passed. After the flax is up and has two well-formed leaves there is not much danger from frost, as it is seldom injured by frost in this stage of the plant. I have known flax injured by frost when first coming out of the ground.

*Amount of Seed—Fertilizers.*—One bushel of seed to the acre is fully sufficient if the object is to obtain seed and lint united—a less quantity if for seed alone, and perhaps a little larger quantity of seed if the lint only be desired. The seed is usually sown by hand, and ought to be scattered evenly over the ground. Machine sowing I have never tried, but have no doubt it could be profitably done. Any method will answer in sowing the seed if it be done in such a manner as to get it evenly on the ground.

The labor of getting in a crop of flax is about the same as getting in a crop of oats. I have found great benefit resulting to the crop by using the following as a fertilizer: One bushel plaster, one bushel ashes and one fine salt, per acre—mixed and sown on the flax as soon as it is out of the ground. This stimulates the growth, adds to the strength of the stem, and increases the quality and quantity of the seed. It is assumed that the land is free of weeds, or nearly so, as they always lessen every crop, and especially the flax crop.

*Harvesting or Pulling of the Crop.*—Harvesting or pulling the flax is the next and the most laborious part of flax raising. The time to pull the flax is when the lower leaves of the stem begin to droop, or when two-thirds of the bolls have turned brown. As it takes some time to gather a large crop, it is well to begin a little too early, as the flax deteriorates in quality as well as quantity, aside from the loss of seed by the shelling out and dropping of the bolls.

Flax should not be allowed to remain longer in the field than is necessary to cure it, when it should be housed. Great loss has been sustained by a little negligence in this respect. Machinery has been made tolerably well adapted to getting off the seed; but, from close observation, and by practical experiments, I do not think any saving has been reached in this direction. A good hand will whip off the seed from an acre in two days, and some much sooner. A large, rough-surfaced stone, or even a plow-share, is used to whip the seed from the flax.

*Methods and Time of Rotting.*—The next process is the rotting. There are two methods. One is by water, called *Water-Rotting*. This method has not been very extensively practiced in this country. It does not increase the quantity, nor quality, except for special uses. This method of rotting is variously accomplished; but the only one adapted to the farmer is putting the flax in some pond or pool of water, and placing sufficient weight upon it to completely immerse it—and here no rule as to time can



be given, as I have had flax fully rotted in five days, and I have had flax in the same pit or pond thirty-two days; and then insufficiently rotted. The judgment alone can be depended on. When the hurl will slip entirely from the stem by drawing it between the finger, it is good evidence of its being sufficiently rotted. It must then be taken from the pond and spread on the land to dry, and when dry taken up and secured. One great desideratum is to keep the flax even in all stages of its handling.

The other process of rotting is termed *Dew-Rotting*. This process is much more simple.

The flax is drawn on a meadow, and if it is low land, the better. It should be spread evenly and thinly, for if care is not taken to do this no after management can remedy the loss. The last of September and fore part of October is the best part of the year to perform dew-rotting. It seldom rots well in the spring of the year. If the weather be warm and wet it soon rots sufficiently—from seven to twelve days; if dry and cool, it takes a much longer time, and the flax may need turning over a few days before it is taken up. It may easily be known when sufficiently rotted by its color being changed, and by taking a few spears in the hand and breaking them. If the fibre readily separates from the woody part of the flax it will do to take up and house. Even in this great care must be taken that the flax is dry, and when dry no time should be lost in securing it.

*The Taking-up of Flax* can be greatly facilitated by raking it, or by taking it up by hand in suitably sized sheaves, and standing it up, even though it should be damp, as it dries rapidly when in this situation.

This is usually as far as the farmer takes charge of the crop, as it is now fitted for the mill, or for scutching. In fact, most of the farmers dispose of flax to the mill owners, who dress the flax as soon as it is pulled in the field. A good flax-puller will average one acre of flax in three days, in pulling and setting up. An expert hand will get off the seed of an acre in two days, and spread, and take up, and bind, an acre in two days more.

**COFFEE AND TEA CULTURE IN CALIFORNIA.**—The cultivation of coffee and tea promises to become an important business in California. One nursery at Sacramento has over 5,000 coffee plants on trial, and it is believed there will no difficulty in bringing up the plant to a standard of hardiness to weather the mild winter of that climate. Near the Mission Dolores several thousand tea plants have been raised during the past year. The tea plant is grown in China and Japan in latitudes corresponding with all California.

## SOME HINTS ON THE CULTIVATION OF HOPS.

The following on the cultivation of Hops, is from Augustus J. Knight, of East Rumford, Maine, in reply to a correspondent of the Maine Farmer :

"In answer to your correspondent in regard to Hop Culture, I will say that the best soil for hops, we think, is the best intervale we have to produce corn. A rich sandy loam is most desirable, as it is easily cultivated, and we find that such soil with twice hoeing shows as good results at harvest time, as a moist sediment soil with double that amount of cultivation, and with equal previous culture. It is preferable to choose a field which is least exposed to wind, that the vines may not be injured while climbing by being whipped against the poles, nor its branches broken when heavy with hops also, by breaking the poles, &c. Poles are, of course, more readily set on soils free from rocks. The best time to plant hops is in the spring, when planting corn. Lay out your field in rows of  $3\frac{1}{2}$  feet each way, which will give you an extra row of corn with no hops in it, and the hop row can be planted alternately with a hill of hops and a hill of corn, which will bring the hop hills seven feet apart. The seed for planting hops, are the roots from some hop field where there are a surplus, which roots have frequent sets of buds along its sides. Two sets or pairs of buds are enough on a piece; two such pieces of roots are sufficient for one hill. In planting thus, three bushels of roots are a sufficient amount for an acre. We plant them about four inches deep. If manured in the hill, part the manure, and get the roots low, as they may suffer from drouth. The hops will nearly all come before the first hoeing of corn. Hoe the same as corn; to Mill high is both inconvenient and injurious. Hops do not bear enough the first year to require poling. They need their first year to get rooted.

The best time to set the poles is as soon as the frost is out of the ground in the spring; the best size being from two and one half to three and one half inches in diameter, and from eighteen to twenty-five feet long, which are plenty small enough for rich soils. Such poles will bear thr; vines. Get the most durable wood for poles, be found in your vicinity, such as cedar, spruce or r. [? Eds.] White maple, and moosewood are very lasting, and are cheaper at three cents each, than some kinds of less durable wood would be at one cent.

I do not plow my hops for hoeing in spring, until they are tied to the poles which is principally done by women; taking woolen ravelings as they are softer to the vine than any other string, and also easily obtained. Hops are generally tall enough to begin to tie by the 20th of May, but begin to tie them as soon as they will reach around the poles

which are set eighteen inches apart on opposite sides of the hill, the hops leaning enough so as not to interfere with others. Two poles in one hill with their tops very near each other are but little if any better than one pole; in large clusters of hops, caused by the vines of two or more poles coming together, the inside ones are light, unlike those on the outside, which have plenty of air and sun, consequently are heavy, being full of seed and lupuline.

The dimensions of the house for drying hops, should be in proportion to the hops raised. One 18 by 18 feet is sufficient for a three acre field; care should be taken to have the heat-room deep enough, so that the funnel when red hot, as a part of it necessarily will be, may not scorch the hops. I would not have it less than seven feet deep, then the funnel can be suspended four or five feet from the hops.—The room should be tight above the sills, and the draughts for ventilation should be below the sills or near the bottom of the room, which will drive the heated air up through the hops. This ventilation, and also some in the upper room is very important to drive away the steam which otherwise will change the color of the hops, and very much injure their value.

In respect to the supply exceeding the demand, it depends very much on the quantity and quality of the foreign crop, which influences exportation, and no crop in that country can be correctly estimated until its maturity, owing to its liability to blight and mould.

I will also state for the benefit of those who may wish a more thorough knowledge of hop culture, that there is a paper, printed expressly for the benefit of hop-growers, by Anderson & Ducher, East Springfield, Otsego County, New York."

**DITCHING WITH A PLOW.**—A correspondent of the New Hampshire *Journal of Agriculture* says: "In the first place, I plow two furrows, and throw them out; this makes the ditch wide enough at the top. I then plow two more and throw them out. The ditch is then twelve or fifteen inches deep, and one ox can no longer walk in it with the other on the surface. I then take a stout piece of timber, five or six inches square, (a round stick would do as well,) and twelve or fifteen feet long. I lay this across the ditch and hitch a yoke of oxen to each end, so that the timber serves as a long whiffletree, with the plow chained in the middle; and as the ditch grows deeper, the chain is let out longer. In this way, there would be no trouble in plowing six feet deep. The only difficulty is in keeping the oxen nearly abreast, as it is new work for them. But by taking light furrows at first, they soon learn. After running the plow through two or three times, throw out the loose earth and plow again."

## ADVANTAGES OF DRAINING.

In his late valedictory address, Edward G. Faile, Esq., as President of the New York State Agricultural Society, made the following sensible remarks:

"From observation of the results of the thorough drainage of land, in which I have had a close personal interest, I am so entirely convinced of the importance of the subject, that I think it cannot be too persistently urged upon the attention of our farmers. I have seen a large meadow of rank, coarse grasses intermixed with rushes, which was wet throughout the year, and did not yield even in pasturage, a tithe of the amount of the interest on its cost per acre, thorough drained with tile in the spring and early summer, fallowed, and the following summer yielding a fair crop of barley. In another case the land was a swamp, yielding absolutely nothing; and within one year, by thorough drainage, it was made to produce a crop of 54 bushels of shelled corn to the acre, which was followed the next season by a good crop of oats, and is now sown to winter wheat, which gives extraordinary promise. There are small portions of similar wet land on many thousands of the farms in this State alone, which in the aggregate would make a large tract, now laying waste and useless, a large portion of which could undoubtedly be reclaimed by the drainage, and being generally rich, strong soils, made to yield a good interest upon the outlay, to the owners, and at the same time add to the healthfulness of the neighborhoods, and the wealth of the State. In thus speaking of the reclaiming of wet lands, I would by no means be understood as considering the beneficial effects of tile drainage as confined to them. On the contrary, the testimony of the leading agriculturists of Great Britain, where the system has been most extensively practised, is uniform, as to its wonderful effect in increasing the productiveness of their clay lands. \* \* \* \*

We are not without instances of extensive draining by leading farmers of this State, and with strikingly favorable results; but with us it is exceptional, and not general, as in Great Britain, and I would urge upon our farmers the importance of giving the subject more consideration than it has yet received. I am convinced that in the Tile Draining there is a mine of wealth, that if worked would add millions to the value of the agricultural productions of our State."

The following experience in draining "a piece of wet, cold and unproductive land" is given by Mr. J. K. Walker, of Springfield, Vt.—He says:

"The drains were cut three and a half feet deep, and the bottoms constructed of stone, like an ordinary culvert, then filled with cobble stones to one foot of the substance; upon these stones shavings or



evergreen boughs were placed, to prevent the dirt from filling the interstices, then covered with dirt, reserving the sod for the barn-yard. The result is given as follows:—The piece drained contained little less than four acres. Last year it was mowed, and produced but two loads of poor, sour hay, and brakes, hardly worth cutting, but it was an average crop for the land. This spring the land was dry, and we were enabled to work early in the season. We ploughed under about twenty-five ox-cart loads of barn-yard manure to the acre, and planted with corn the 15th of May. The ground was dry and in good condition for receiving the seed, while many pieces considered 'dry land' where much too wet. The crop was planted three and a half feet apart each way, hoed twice, and received a top-dressing of plaster and ashes. It was cut up the 10th and 11th of September, when it was found ripe and sound. We husked from the piece 440 bushels of ears of merchantable corn. My neighbors concur with me in opinion that this crop is worth more than the aggregate crops that the land has produced for the last fifteen years. It is now in a condition to produce abundantly for a series of years without any extra outlay. This crop has paid me the whole expense of underdraining."

#### Oyster Shell Lime.

Every oyster shell is worth several kernels of grain, and if properly managed it can be made to yield its value. There is scarcely a village within two hundred miles of the seaboard without its regular supply of these bivalves, and in the course of a year there is a large accumulation of shells. These may, in most instances, be had for the asking; the keeper of the saloon is glad to get rid of them.—Farmers living near villages should secure the privilege of carting them away during the winter, to be reduced to lime for home use. A kiln is not necessary to burn them. Make a pile of any rough fuel, as stumps, old roots, brush, peat, turf, etc., eight or ten feet square and three feet high. On this spread, say about fifty barrels of shells, and cover with a layer of combustibles a foot thick. Bank up the sides, and cover the top with sods. Fire the heap on the windward side, and when the whole is burned, there will be left a large amount of valuable material to be used for top-dressing, or, better, to mix with the muck heap. In some places, the oyster shells are crushed or ground, like bones, in a mill. Some farmers claim that the ground shells last longer and act better than the burned shell lime. For peaty or cold, damp soils, we should prefer the caustic alkali produced by burning, which is similar to common lime from limestone.—*Valley Farmer.*

Avoid borrowing and lending.

#### CONCENTRATED LABOR.

A correspondent of Chester County, Pa., in writing to the *Maine Farmer*, over the signature of "Rusticus," in speaking of the concentration of labor, which had been so highly favored by the editors of that journal, and which meets his decided approbation, says:—

"I would add a few comments of approval to your editorial upon 'Concentrated Labor.' This is a favorite theory of mine, because I have lived all my life in a community where it has always been practised and successfully carried out. Chester County is essentially a grazing district. We pay some attention to dairying, but raise no grain for sale, in fact I doubt if we grow enough for home consumption, and yet our soil is scarcely inferior to the famed Genesee Valley for producing that crop. Feeding cattle has been the great one idea of our farmers, from time immemorial,—they have grown rich upon it and cannot be tempted into any other course of farming. I speak, of course, of the great mass of our farmers; there are a few who practice a mixed husbandry, but they are our 'small farmers' whose acres number from forty to fifty, while the farmers generally in this county will average at least one hundred and fifty acres of cultivated land.

"Our routine of cattle feeding is very uniform. During the latter part of summer or early autumn we lay in our stock cattle—which are brought here for sale in large droves from the Western States. They range over our fine green-grass pastures till winter sets in—by which time they are in good flesh and prepared for the rigors of the season. We feed them on the best of hay and corn-fodder—our saucy bullocks would turn up their noses in disgust at straw, till about the 1st of May, when the pasture fields are ready to receive them. Here they run 'in clover' till August, by which time they are ready for market. This routine of grazing dispenses with one half the amount of labor required in grain-growing, while it is nearly as profitable, and less exhaustive to the soil—as our crops are necessarily consumed at home and returned to the land again. This is a very important feature of the system. You see no worn out and exhausted fields in our cattle-feeding districts;—*au contraire*, the land is gradually improving, and even 'holds its own' when over-stocked, as frequently happens with some of our more thoughtless farmers. I have my doubts, however, whether our profits in hand are so sure or so large as in an energetic and skilful mixed husbandry.—But our Chester County farmers, who are generally in 'good circumstances' and disposed to take the world easy, prefer the more moderate profits of cattle-feeding with moderate labor, to the larger profits with greater wear and tear of mind and body, required in general farming. We are pretty sure to dou-

ble our money in feeding a lot of cattle;—that is, if we pay forty dollars per head for our bullocks this fall, we calculate to get eighty dollars next summer, with a yard full of good manure for the improvement of our land. Thus, each good sized bullock will clear for its owner a dollar per week all the year round, and with less trouble to him than would be required to make the same amount of profit at any other branch of farming. Do you wonder then, Messrs. Editors, at our persistency in cattle feeding and at our own concentration of labor to this purpose? Our land being of the best quality is well adapted to the business, and by the way, I might add that first rate land is a *sine qua non* to successful cattle feeding. You might as well attempt to grow trout in a frog pond, as to feed cattle to advantage on second rate land. But, I imagine you will vote me a bore if I talk any longer, so good bye till another half hour's nothing-to-do catches me, when I will indulge in another chatting over rural topics down this way."

#### Top Dressing for Grass Land.

It will be found far better to keep coarse manure in a heap and under cover till autumn, than to use it as a top dressing for grass land in the spring.—Coarse, unfermented barnyard manure, if spread upon the grass land in the spring, will be found of little value. The true reason of this is, manure needs to ferment, more or less, before it will be prepared to promote the growth of plants. Coarse manure will not ferment very rapidly in the spring of the year while it remains on the surface of the soil. And more than this, in the spring the tendency of everything is upward, and the fertilizing properties of coarse manure fly away in the air, unless there is a little earth over them to absorb them. In autumn everything tends downward into the earth, where it will be ready to promote the growth of plants next season. The fine scrapings of yards, and even common earth spread thinly on meadows in the spring, will often be the means of doubling the crop of hay; whereas coarse unfermented manure spread in the spring, will seldom do much good.—*Country Gent.*

OLD SHEEP PASTURES.—In some parts of Britain, particularly Wales and Scotland, land has been constantly grazed by sheep for more than a thousand years, with no diminution of fertility or production, as is known from the number of sheep kept from year to year. Of course, the newness of our country does not admit of its furnishing any such example as this; but we have lands on which sheep have been pastured ever since the forest was cut off, embracing in some instances a period of nearly two hundred years.

## GARDENING AND ARCHITECTURE.

CONCLUDED FROM OUR LAST.

Statuary, vases, and similar architectural ornaments, Mr. Kemp regards as the fitting associates of Grecian and Italian houses, and less suitable in relation to every other style; not that such things as low terrace walls, with or without tracery, pillars for sun-dials, ornamented with the details of pointed architecture, and even vases or urns of a particular form, and with proper decorations, will be faulty in connexion with Gothic buildings, and formal gardens, of the same character; only the varieties of the Grecian style, with their architectural arrangement of walks, beds, &c., would appear, he thinks, most to correspond with and demand such ornaments as vases, tazzas, urns, pillars, sculptured figures, basins of water, with fountains, and the like things, to carry out and finish their expression and design.

In discussing the subject of the association of gardening with architecture, more especially with reference to gardening, under the heads of "Garden Architecture" and "Architectural Gardening," the author says:—

"Gardening and architecture, like all the fine arts, have much in common. And that department of architecture which belongs more exclusively to the garden has, especially, a great affinity with gardening in its broader principles. In fact, there is much more relation between the two than is usually admitted, or than the ordinary products of practitioners in either art would at all justify us in believing.

Architectural decoration is not, as many would assert, unfitted for English gardens, on account of the coldness or dullness of our climate; because stone gets speedily weather stained and sobered down in colour, and the fine evergreens and beautiful grass of this country will, in association with architectural objects, impart sufficient warmth of tone. France, Italy, and even China, have been more zealous in applying garden architecture than Great Britain. And the earlier specimens of English gardening are often richer in architectural features than those of a later period. There has, indeed, been a subsequent retrogression in this branch, in consequence of the introduction of a more natural manner; for gardening, like most artistic pursuits, has had its historical cycles.

Modern tendencies in gardening have been too much away from its character as an art, and the more it is restored to its legitimate position, the more nearly will it be brought into kindred with architecture. On the other hand, the too commonly cumbrous, regular, and unyielding nature of architectural objects, when used for garden decoration, has tended still further to detach two pursuits which are essentially and obviously allied. For, as a house and a garden are naturally and intimately associated, and it is a law of the universe that the boundaries of each domain in the natural kingdom should insensibly mingle and be lost in each other; so it is plain that an unviated taste would be most gratified when the province of architecture is extended



so as to embrace lightly and harmoniously such parts of the garden as may be most contiguous to the house; while the garden also, in these parts, rises in character to meet the requirements of the architecture, until either art is so refined and attenuated that it would be almost difficult to say what belongs exclusively to each. \* \* \*

The province of garden architecture is, primarily, to supply fitting appendages and accompaniments to a house, so that the latter may not appear naked, alone, and unsupported. If judiciously applied, it will be effective in helping to produce a good outline or group; to carry down the lines of the house; to connect it with other buildings, such as a conservatory, arbour, &c.; to provide a proper basement for the house; to afford shelter and privacy to a flower-garden; to extend the façade or frontage of a house; to shut out back yards, offices, &c.; to enrich, vary, and enliven the garden; to supply conveniences, such as shelter, receptacles for birds, plants, sculpture, &c. with museums for works of art, or specimens of natural history, and supports for climbing plants; to indicate refinement, wealth, and a love of art; and otherwise to blend the various constituents of a garden with the house, and harmonise the two by communicating a more artistic tone to the garden.

Wing walls to a house, broken by a conservatory and terminated by a summer-house, aviary, museum, or sculpture-room; corridors, similarly broken and terminated, and glazed or open so as merely to form covered ways; conservative walls, either glazed or simply protected by bold projecting piers and copings; viaducts, aqueducts, arbours, arches, arcades, tunnels, boat-houses, temples, prospect and flag towers; with an almost infinite number of smaller objects, such as sculptured figures, sun-dials, statuary, pillars, obelisks, terrace walls, &c. constitute the elements with which garden architecture has to work.

In its leading traits it necessarily comes within the same category as house architecture, and is governed by the same principles. Like the house, it should exhibit design, some degree of symmetry, harmony of parts, unity of expression, consistency of style, fitness for the locality, adaptation for the intended purpose, and stability and permanence of appearance.

But it should also display a greater amount of lightness and elegance; a comparative absence of regularity; a decorative rather than an exclusively useful purpose; a superior variety of outline; extreme attention to general grouping; a blending of its forms with those of nature; an especial regard for placing its creations where they will have a distinct meaning and object; a leaning to the use of good materials, but somewhat rougher than those employed in the house; a preference rather for a picturesque outline than for mere ornamental details; and, as a most important characteristic, a marked boldness and prominence of parts. Indeed, picturesqueness, such as would be occasioned by changes of level in the ground, by diversity in the heights of walls, by prominent piers, buttresses, or cornices, by broad projecting eaves to the roofs of buildings, and by any arrangement that will yield depth of shadow, should be the ruling constituent of garden architecture."—*The London Builder*.

The world estimates men by their success in life, and, by general consent, success is evidence of superiority.

### A Few Maxims for Farmers.

1. The farmer who does not return to his fields a dressing more than equivalent to the crops gathered therefrom, is as unwise and thoughtless as he who would neglect to feed the horse that was to carry him on a journey. In both cases diminishing the ability of a faithful servant to minister to his wants.

2. The husbandman who obtains from a field not properly manured, a small yield of grain, when by sufficient manuring he might have obtained a large one, is selling his labor at half its value.

3. In all cases keep the best products of your farm whether of grain or stock, for your own use, that improvement in each may result therefrom. If three poor sheep will bring as much as one good one, keep the one and sell the three.

4. Do not permit the remains of animal or vegetable substances to decay about your dwelling, but incorporate them with the soil or the compost heap, thereby securing the comfort and health of your family and adding to the attractiveness of your home.

5. Having things "near enough," often causes much trouble. The head-board to farmer A's cart was a little too short, but it was "near enough," consequently it came out in passing over a jolt, and with it half the potatoes. The keys to Mr. B's wagon thills were rather small, but they were "near enough"—so they worked loose, the thills came out and the wagon and horse got wrecked together in going down hill. The bar to Capt. C's cow pasture was too short, and yet he thought it was "near enough"—but it dropped out one day and the cattle got through and destroyed his grain. It is better and cheaper in the end, even if it does take a little more time, to have things just right.—*Me. Farmer*.

AIR AND OCEAN.—INTERESTING ITEMS.—The air is made up of a mixture of two gases, oxygen and nitrogen, and it always contains considerable watery vapor and carbonic acid. In his new work on chemistry, Prof. Youmens states that if all the air were reduced to its average density at the earth's surface, it would extend about five miles high, and if the above constituents were arranged in layers one over the other, we should have first, at the bottom, a bed of water all over the earth's surface 5 inches deep; next a layer of carbonic acid 13 feet deep; next above, a layer of oxygen gas about a mile deep; and above this a layer of nitrogen gas about 4 miles deep. This will help the memory. Sea water contains about 4 ounces of salt in every gallon. Estimating the ocean to average two miles in depth, the salt, if separated in a solid bed, would line the bottom of the entire ocean to a depth of 140 feet.

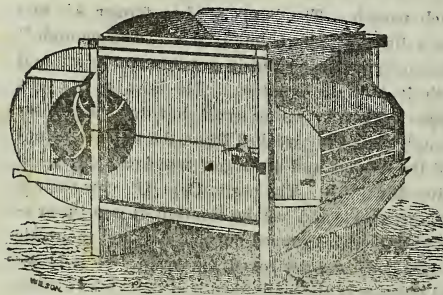
Never make money at the expense of reputation.

# FARM IMPLEMENTS & MACHINERY.

## NO. NINE.

### GRAIN FANS.

An efficient and perfect Grain Fan, among all the great improvements of this progressive age, is of the utmost importance to all grain growers, as it enables him to advance materially the market value of his products. The practice that prevails to no small extent of sending grain to market imperfectly cleaned, is bad economy for the farmer, to say the least of it. The loss that results to the farmers of our State, from this cause, amounts to thousands of dollars annually. A crop of wheat thoroughly cleaned from the chaff, foul seeds and other trash, will sell from five to fifteen per cent. higher than the grain that reaches market in the condition that much of it does from the hands of slovenly farmers. There are many things that a farmer cannot afford to do, if he only knew what was best for his interest.



WHEAT FAN.

Sending grain to market imperfectly cleaned is one of the things that no farmer, whether rich or poor, can do without a decided loss. The manner in which grain is cleaned is a matter that attracts the attention of the miller, as much as the quality in any other respect, and he demands a deduction accordingly. All grain that is now received at the flouring mills is cleaned over in order to produce the best possible quality of flour, and that which contains the greatest quantity of foreign matter is subject to the heaviest loss, and the purchaser always avails himself of the argument afforded by a badly cleaned lot of wheat, in order to secure the greatest deduction from the standard of a well cleaned article of an equal quality in other respects. Wheat thoroughly cleaned from all foul and foreign matters, is not only better in itself, and brings a price much more than corresponding to the difference in weight between a foul and a well cleaned article; but the badly cleaned wheat is liable to injury from dampness and mould, arising with the

foreign matters mixed with it. Two lots in every other respect of all equal quality, the one well cleaned, the other containing oats, and dirt of various kinds, adding, perhaps, not two per cent. to the weight, is sold at discount from the other lot, equal to ten or twelve per cent. Another lot cleaned in like manner is passed as unmerchantable, having become musty, which, originally, was equal in quality to some of the best lots, and would have brought the market price had it at first been well cleaned.

A little care in running the grain through the mill will obviate this difficulty, and in some instances we have no doubt but that it would pay well to run the grain through a second and a third time, and render it perfectly clean. A reputation is worth something in market, in the sale of almost any commodity, and this may be true in the case of well cleaned grain. A more careful preparation, by one of friend Montgomery's, or other good fans, would almost pay, by the additional price obtained for the cost of the Fan.

The *Prairie Farmer*, in a late number, in speaking of "Cleaning Grain Well," says:—

At a late farmers' meeting, one gentleman stated that he had lost \$50 on his wheat crop, by not properly cleaning it. Instead of getting \$1.82 a bushel, had he cleaned it he could have realized \$2—a saving of 18 cents per bushel.

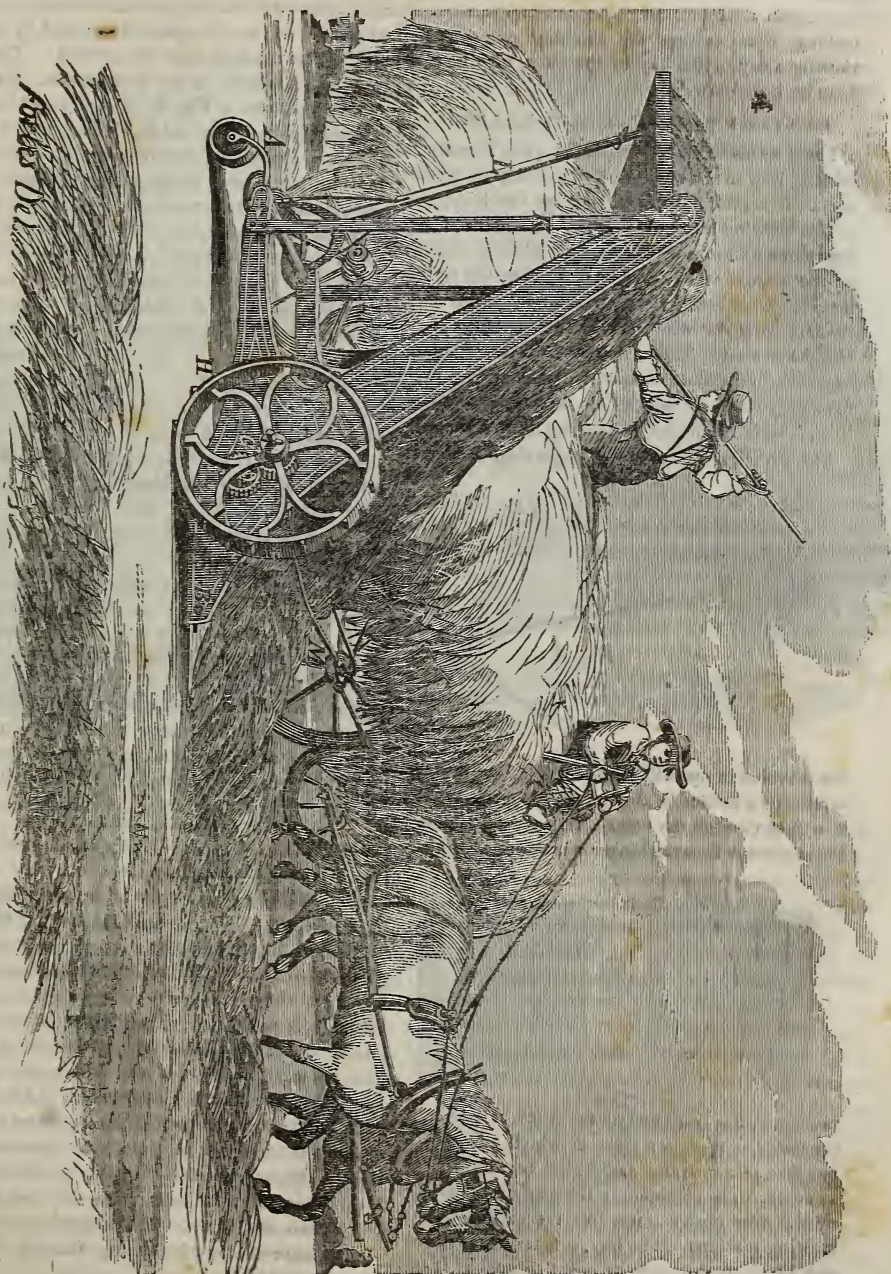
It is always an actual loss to farmers to have their grain go to market poorly cleaned. The country shipper often, by the use of a good mill, makes rejected wheat pass as No. 2, and No. 2 as No. 1, and thus realizes a handsome profit. The farmer might by a little outlay, and a little more labor, pocket this amount as well as the grain-dealer. In the aggregate, the country through, this is an important item; and we are glad to notice the publication of such figures and statements as the above, in local papers. It shows that farmers are waking up to the importance of looking after these little leakages that have been stripping their occupation of its profits.

The first step towards reformation is conviction, and the more farmers that become convinced that they are losing money by little negligences of this character, and will confess it before the people, the better for the whole profession. On a grain farm a good fanning mill or grain separator is second to no implement in importance. Farmers should watch all improvements in these mills with great care.

**SCREWING ON NUTS.**—We have sometimes known nuts to be found so tight that no wrench would remove them. This was because they had been held in the hand till they became warm, and being then applied to very cold screws in winter, they contracted by cooling on, and thus held the screw with an immovable grasp. Always avoid putting a warm nut on a cold screw; and to remove it, apply a large heated iron in contact with the nut, so as to heat and expand it, and it will loosen at once—or a cloth wet with boiling water will accomplish the same purpose.



## BENTLEY'S PATENT HAY-LOADER.



Through the kindness of the editors of the "AMERICAN ARTISAN," published in New York, we are enabled to present to our readers the accompanying engraving and description of Bentley's Hay-Loader. In sections of our country where the hay crop is large this machine will prove of great utility in enabling the crop to be gathered promptly notwithstanding the scarcity of field hands. By the combined labors of the mowing machine, the hay-tedder, the horse-rake, the horse-unloading hay fork, and this new and admirable contrivance for loading hay in the field, everything connected with hay

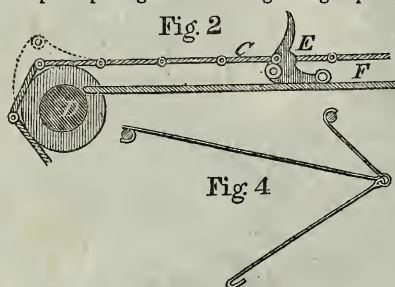


making, from cutting the standing grass to the stowing away of the hay in the barn, may now be done by horse-power.

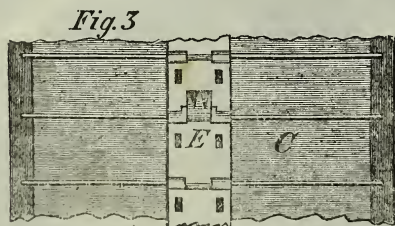
#### BENTLEY'S PATENT HAY-LOADER.

There seems to have been, until quite recently, a missing link in the chain of hay making by machinery. Everything, from cutting the standing grass to the stowing away of the hay in the barn, has been done by horse power, except placing the hay on the wagon. The chain is made complete by the machine illustrated by the engravings, which takes the hay from the windrow, puts it on the wagon, and rakes after. This machine is attached to the hay-rack in a simple manner, which enables it to be drawn by the same team as the wagon, and it is set in operation by the act of drawing it along.

The principal figure of the engraving represents



the machine in operation loading a wagon. Fig. 2 represents a section of the elevating apparatus; Fig. 3, a face view of the same; and Fig. 4, a plan of the apparatus for attaching the machine to the hay-



rack. At the front end of the truck or carriage of the machine there is a rake, B, which takes up the hay like a horse-rake, and which can have a lever attached, to be operated by the man on the load, to raise it over obstructions, like the cutting-bar of a mowing machine. The hay is taken from the rake and lifted to the requisite height to enable it to be deposited upon the wagon by means of an inclined endless chain elevator, C, which carries a number of self-adjusting forks, E, which run on stationary ways, F, in such manner that as they ascend they are held in positions to take the hay. The apron runs on two rollers, the lower one of which is geared by the gears, G, with the axle of the driving-

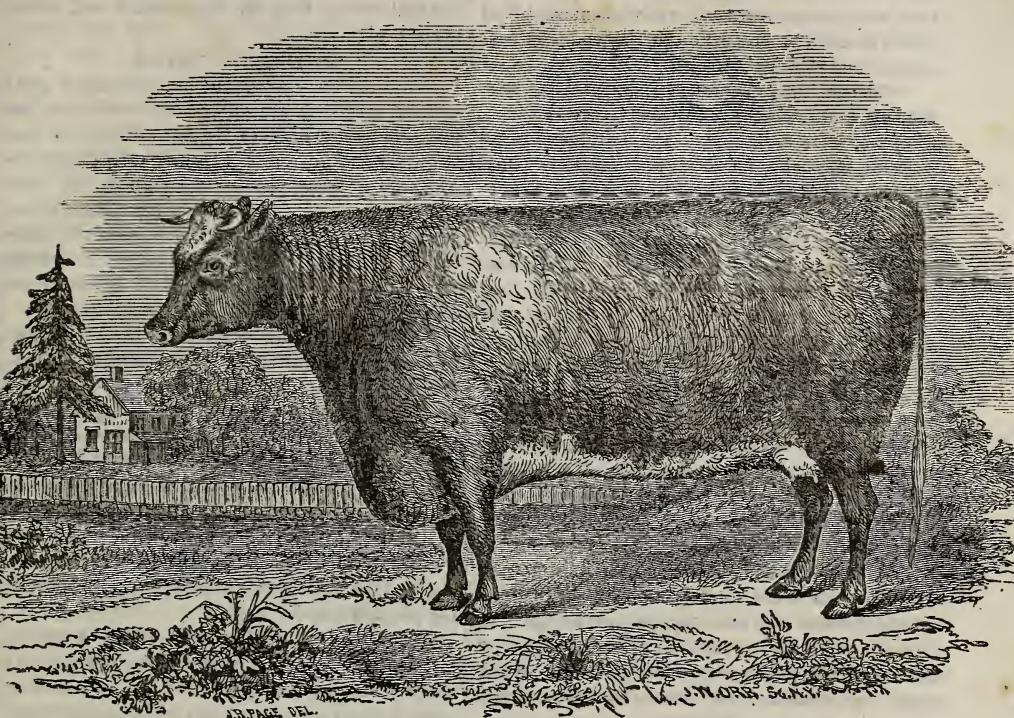
wheels, H, so that the apron is operated by the running of the machine over the ground. The lower roller is not visible in the drawing, but the upper one, D, is shown in Fig. 2. The forks, as they pass over the upper roller, fold down as shown in dotted outline in Fig. 2, and remain so during their descent and until they have again passed the lower roller and commenced to ascend, and in this way they are prevented from carrying the hay over past the inclined discharging board, J, at the top of the machine, and thereby scattering it on the ground and defeating the object of raking after. The elevator delivers the hay upon this discharging board, down which it is raked on to the wagon as the machine is drawn along therewith. This board is supported in its operative position by the handle or tongue, L, of the machine, and when this handle is removed the said board folds down at the side. The handle serves to draw the machine backward about the field when disconnected from the wagon. When the machine is drawn about in this way the elevator does not operate.

This machine is simple and durable, and so constructed that no fine hay can fall through or wind up in the machinery, and it will be of especial advantage to farmers by doing away with the slow and laborious method of pitching hay by hand, especially when they have a large quantity ready to go into the barn and expect rain in a few moments. The inventor of this machine is W. H. Bentley, of Westford, Otsego county, N. Y., from whom further particulars may be had by addressing.

**THIRST AND HUNGER.**—Every one is familiar with the fact that the animal system can bear up much longer under the influence of hunger than under that of thirst. The reason is that during abstinence from food the organism lives upon its own substance. The accumulation of fat feeds the system, which does not suffer materially until that source of sustenance is exhausted. During abstinence from liquid, the organism has no self-sustaining supply. Except when a person is placed in a very moist atmosphere, three days of deprivation of drink is usually the limit of endurance; while persons have been known to exist without food from fifteen to twenty days. Raging thirst is the most terrible infliction which can be visited upon man—it is far more terrible than starvation. The subjection to thirst is much more effectual in taming animals, than their deprivation of food.

**THE PLOW.**—It is not known where he who invented the plow was born, or where he died; yet he has effected more for the happiness of the world than the whole race of heroes and conquerors who have drenched it with tears and manured it with blood.





DEVON COW BLOOM, at 4 years old, property of Lewis G. Morris, New York.

## DEVON CATTLE.

BY C. N. BEMENT.

The North Devon cattle are perhaps the purest bloods known, being an improved stock which has never been crossed by any other breed. They are a very valuable and distinct breed, possessing several characteristics peculiar to themselves, and of which they are very tenacious. They are esteemed for their fine proportions and their uniform red color, varying to a bright bay or mahogany color, no white on them excepting the brush of the tail, which is a sure test of the purity of their blood. When calves, the tails which form the brush are always darker in color than the bodies. By the time they are eight or ten months old, they are pretty white, which never fails in a pure Devon, and generally runs in the blood to a very great extent. Originally there were two varieties of Devons, possessing different properties of excellence. The South Devons were represented as heavy in the fore quarters, long and elevated horns, active, vigorous and lofty in their carriage, but rather light behind, and their tails somewhat heavy, their color light red.

The North Devon is medium in size, they are excellent for the yoke, but not generally esteemed as

milkers, though rather famous for giving rich milk, which yields a very large amount of butter. Seven or eight quarts of their milk has made a pound of butter. All who have attempted to give their character, agree in the quantity of their milk. They do not all give a large quantity of milk, though we have known individuals giving sixteen, to twenty quarts, from which two pounds of rich yellow butter has been made; in fact, the writer once had a cow, that, from the milk of ten days, twenty pounds of good butter was made in the month of December.

It is a prevalent opinion among those who are not acquainted with the Devon cattle as a breed, they are so diminutive in size, and such poor milkers, that they are of little value to the farmer; this we think is a great mistake. They are, to be sure, small when compared with the Durhams and Herefords, but generally as large as the so-called common or native cattle; and when fed on common herbage, the cows will weigh from six hundred to eight hundred pounds dressed, and the oxen from one thousand to one thousand four hundred pounds; and with extraordinary feeding they become very heavy and weigh well to their appearance. They mature early—hardly so ripe as a Short Horn or Hereford, but at four years old are fully ripe for the shambles,



and at three good. He is a quiet feeder, with finely marbled and juicy flesh, well mixed with fat and lean, and proves remarkably well when dressed, and yields as much in proportion to the food they consume as any other breed.

"The cow," says Youatt, "is much smaller than the bull, and the bull considerably less than the ox. They are small in the bone, fine and clean in the limb, straight on the back, full in the chest, free from dewlap, prominent and bright in the eyes, keen in their looks, sprightly and active; and possess more of the appearance of what is termed blood in the horse than any other breed of cattle. Their horns are long and fine, tapering and yellow at the roots when young. Skin yellow, soft and mellow, hair silky and wavy or curled. The circle around the eyes, and flesh of the muzzle yellow or orange color. Their uniform appearance renders them very easy to match for labor, for which none can excel them. They are docile and tractable, and always command the highest price for working cattle. Their beef is of the best quality, being what *fleshers* term 'well mixed or marbled with fat and lean,' and proves remarkably well when dressed, and yields as much in proportion to the food consumed as any other breed."

Let us look about a little, and name a few enterprising persons who have imported and are breeding pure Devons. By far the best and most perfect herd of Devons which has ever fallen under our notice, were in possession of Mr. George Patterson, Sykesville, near Baltimore, Maryland.

The originals of these fine animals were imported about the year 1814. They were presented to Messrs. Patterson and Caton, two distinguished merchants of Baltimore, by the Earl of Leicester, then Mr. Coke, Holkam, England.

Not being practical agriculturists, these choice animals met with indifferent treatment in their breeding, and for many years were neglected among the stock of their farms. But falling some years after into the hands of Mr. George Patterson, who readily saw their value for the locality and soil of his estate, he improved them by importing bulls from Mr. Bloomfield (the principal tenant of Lord Leicester, and indeed the real breeder of the fine stock of Devons for which his Norfolk estate has become so celebrated,) a most valuable bull, by which his stock was in a very few years brought up to a standard, excelled probably by a few herds of Devon cattle in England—certainly by none in this country. These Mr. Patterson has continued to breed with great success ever since, improving their blood with continued fresh importations whenever it could be of the least advantage to him to do so. So fastidious has he been in his breeding, that for several years after he commenced, he steadily refused to part with a single animal to breed, until he got his herd

to suit him in their general excellence, and he had made his third trial of imported bulls from England, and the last one from Mr. Bloomfield's herd, above referred to.

#### THE DEVONS AS MILKERS.

As a breed the Devons are not considered great milkers, so far as quantity is concerned; but yet there are some exceptions, but for butter, as we hope to prove, they are equal, with the exception of the Alderney or Jersey cow, to any other breed. Like our common cows, there are poor, middling and good milkers amongst them. Instances are on record of Devon cows having produced an average yield of over two hundred pounds of butter per cow, per annum, in a dairy of twenty cows.

The late Rev. Henry Colman in his "European Agriculture," says, "The Devons are, as a breed, most highly and universally esteemed." Of their milking properties, he remarks, "the North Devons have strong advocates as a milking stock. The most productive cow in butter which I have found was a Devon which for several weeks in succession, without extra feed, made twenty-one pounds per week. The character of the owner places it beyond a doubt." He gives other cases corroborating the above. We will now give some proof of their milking properties nearer home.

Mr. C. P. Holcomb, of New Castle, Delaware, had a Devon cow from whose milk, produced, in a single week, nineteen pounds of butter, and averaged fourteen pounds and twelve ounces of butter for twelve consecutive weeks.

Mr. Andrews, of Connecticut, says he made from one of his Devon cows, nine pounds and six ounces of butter in seven consecutive days in the month of January. Another cow of his yielded, in ten days, in the month of June, on grass alone, one hundred and twenty-nine quarts of milk, making thirteen pounds of butter in the hottest weather of the month. From this circumstance he was induced to try the ten succeeding days, which reached into July, and found the yield to be one hundred and thirty-nine and a half quarts, to a yield of fourteen pounds and one ounce of butter, allowing the yield to be the same per quart as in the hot weather. As the weather was much more favorable, he was satisfied it would have yielded fifteen pounds.

The Devon cow "Ruby," owned by Mr. W. S. Cowles, of Farmington, Connecticut, dropped her calf in February, made in the month of April following, one pound thirteen ounces of butter per day, equal to nearly twelve and a half pounds per week.

The writer once owned a Devon cow which dropped her calf late in autumn, and from the 10th of December to the 10th of January, including both days, there were made from her milk, fifty pounds



of well worked butter, nearly equal to two pounds per day. She was fed with good hay, roots, and buckwheat bran. We also had a Devon heifer at two years old, from whose milk, in the month of June, was made one pound of butter per day, on grass alone, and not very good at that.

These cases, enumerated above, we think establishes the fact that the Devons, *as milkers*, do not fall behind the *crack* breeds for milking properties.

In our experience we have found great difference existing in all breeds of cattle; some cows run to fat, and those are apt to be spare milkers; the lean and well formed are apt to be good ones; some digest their food better than others, and these do better on the same pastures or quality of food; some feed faster and more constantly, and these are the best milkers, which run with others in the same pasture. There appears to be as much diversity among cattle as among men and women who may daily sit together around the same table. No error can be greater than that of believing a cow can give rich milk upon poor, lean, spare diet. There must be in the food that which will supply the materials or ingredients of which milk is composed or else it must be impossible for the cow to produce it. The better the food, the better and richer the milk.

Many of the cows, whose surprising products have been spread before us in our agricultural reports, have had the advantage of great care and abundant and rich feeding either of the pasture or the stall. It could not be otherwise, the effects only followed known causes.—*Am. Stock Journal*.

### Sprung Knees in Horses.

Dr. Jennings, who is one of our very first veterinary surgeons, thus speaks as to the causes of this disease or happening to horses:

"The trouble does not always result from an injury of the leg, or strain of the tendons; it is more often found in horses that have bad corns in their feet, or troubled with navicular disease, than any other. The animal raising his heels to prevent pressure upon the tender parts, bends the knee, which bending becomes finally, from the altered position of the limb, a permanent deformity. Horses with sprung knees are unsafe for saddle purposes, owing to their constant liability to stumble. Respecting treatment, it may be said that six out of every ten sprung-kneed horses will be found to have corns. If these be of recent growth, there is a fair prospect of straightening the limbs by removing the corns as directed under the head of that disease; by the removing of these the heels are brought to the ground, and the limb becomes straight. Under any other circumstances all treatment proves useless."

He that tells his wife news is but newly married,

### The Improvement of our Farm Stock.

The following we extract from Mr. Cornell's remarks on a subject of vast importance to the Agriculture of our State. His figures and suggestions are worthy of careful study:

"The improvement of farm stock is a subject deserving more of our attention than it is receiving. It is true that by comparing the present with the past, we can show a marked improvement, and trace much of our prosperity to that cause, but we cannot claim our improvement to be the result of any system, and I think it is fair to assume that our ratio of improvement is far below what might be expected from the facilities we have at command. I shall not complain that our farmers do not purchase thoroughbred animals of improved breeds, at high prices, for stocking their farms. I think they are wise in not doing so. I know they cannot afford it. I also know that they cannot afford to neglect the improvement of their farm stock. How, then, can they best do it? I answer, by a systematic use of carefully selected thoroughbred males, from the improved breeds best adapted to the localities and purposes for which the animals are kept. The practice, too common among those of our farmers who attempt to improve, is to seek one cross with a thoroughbred male, and then resort to the use of the half-breed offspring. This is back-sliding. The get of the half-bred male will, as a rule, possess less merit than he does himself, and hence time is passing with a diminished ratio of improvement.

Let our farmers adopt as a rule the practice of using thoroughbred male animals, and discard all others, in breeding stock for the dairy and shambles, and the following would be the result in ten years, allowing the females to come in at two years of age: The produce of 1865 would be half blood; those of 1867 would possess three-fourths of the improved blood; those of 1869 would be seven-eighths, and at the expiration of ten years the alloy or common blood would be reduced to one thirty-second of that represented in the animal, and for all practical purposes the produce of the fifth and sixth generations, and beyond would rank in value with the improved breed."

**SIGNS OF A GOOD OX.**—A prominent stock-breeder gives the following as his rule for judging the points of an ox:

"You should stand before him and be sure he has a fine hazel eye, large nostrils, long from the eye to nostril, broad at and above the eye, rather slim horns, toes straight out before him, straight in the knees, bosom full, back straight, and ribs round and wide as his hips. If you find these points, you need not ask of what breed he is, but if you want one buy him. A little black-eyed ox is not to be depended on, as he will kick and be ugly, while a short headed ox will start from the whip, but he will soon forget it."

## USEFUL RECIPES.

## DISEASES OF THE HORSE.

Colic and inflammation of the bowels, are two very common diseases, often confounded together. With colic the pulse is natural, not fifty a minute, the animal often rolls, the disease intermits, and there is usually not much fever. With inflammation there is much fever, the pulse sometimes raising to nearly a hundred a minute, the attack is gradual, and the disease does not intermit.

The remedies proposed are of the simplest character, and not those often used by professional men.

*For Colic.*—If from badly digested food, give a pint or more of a solution of salaratus; or a mixture of half a pound or upwards of fresh powdered charcoal with thrice its bulk of water, is still safer. Spasmodic colic may be treated with the charcoal internally, and brisk friction externally, and a quart of peppermint tea with a spoonful of powdered cinnamon may be given. Ginger tea is also useful.

*For Inflammation of the Bowels.*—This is a difficult disease to cure, and horses generally are killed by the amount of irritating medicines administered, which only add to the disease, such as whisky, gin and molasses, salts, castor oil, gunpowder, &c.—Give a drink of slippery elm every hour, to allay irritation—keep the animal quiet—let him have but little food, and let that be weak gruel. Avoid bleeding.

*Scours and Diarrhoea.*—Sometimes this arises from irritating matter, in which case it must not be checked too soon. When it proceeds from exposure after over exertion, let all the drink the animal takes be slippery elm water, with occasional doses of spoonful of charcoal. The food should be dry. Raspberry leaf tea is a good drink after the symptoms begin to subside. In severe cases, twenty or thirty grains of kino may be given in a quart of thin flour gruel, twice a day.

*Cold or Catarrh.*—This is a common and well known disease. Medicines generally are of little use, except to allay attending symptoms. Good nursing and careful management are best, avoiding any exciting cause calculated to increase the disease, or retard the gradual cure that nature commonly effects. If followed or accompanied by a hard cough, green food should be given—if in winter, turnips or ruta bagas with warm wet meal are useful. A moderate feeding of fresh apples two or three times a day operates as an expectorant and relieves the cough.

*Heaves.*—When a horse is fed on musty hay, and his cough begins to assume symptoms of heaves, immediately procure good hay, if possible, or else cut the hay fine and always feed it wet, to which

add a spoonful of ginger daily until the symptoms disappear. A horse which has heaves once established, cannot be cured, but the disease may be kept so latent as to be of no inconvenience, by always feeding wet chopped food.

*Scratches.*—(A cutaneous and troublesome disease just above the hoof.) Keep the affected parts clean by washing with soap and water, and then apply a solution of chloride of lime.

*Distemper or Horse Ail.*—(attended with thickened discharges from the nose, and sore throat, often a tumor under the jaws, and weakness.) Rub and curry often to promote warmth and circulation—keep warm and comfortable, and if the animal refuses to eat, withhold all drink, but place before him warm mashes which he will swallow when he finds his water is not given. He will often eat wet hay, slightly salted, if given him morsel after morsel by the hand. Scraped carrots are excellent.—The principal object is to keep up his strength and flesh, until the disease runs its course. A seton is often advisable, diverting the disease.

## SOUTHDOWN SHEEP.

We presume there are but few farmers who are sheep-raisers but know whence originated the Southdown sheep. But as there are no doubt some, the following brief history which we find in the *American Stock Journal*, as to their original character, will be read with interest:

No class of sheep so clearly demonstrates the effects of good feed and careful breeding as the improved Southdown. The original breed having been raised from time immemorial upon a low range of chalky hills, running parallel with a part of the southern shore of England, the greater part being in the county of Sussex. These are called the South Downs. They are eighty miles in length and from five to six miles in breadth—the highest point being above the level of the sea. The soil is light and sandy; the grass short, but very sweet.

The valleys among the Downs were once almost as barren as the hills themselves, but by cultivation have been rendered exceedingly fertile, to effect which the sheep have rendered considerable aid, pastured upon the hills by day, and folded upon the arable lands by night, which it enriched with its manure, and received a recompense in artificial food raised for that purpose, such as rye, grass, tares, clover and rape; and in spring frequently turned upon the young rye; in winter they are fed with a good supply of turnips. Thus, while they have aided in changing the character of their feed, that feed has aided in changing their character and the character of their fleece.

Choose a wife rather by your ear than your eye.



THE  
MARYLAND FARMER & MECHANIC.

AT \$1.50 PER ANNUM,

PUBLISHED ON THE 1ST OF EACH MONTH,

BY

S. S. MILLS & CO.

No. 24 South Calvert Street,

CORNER OF MERCER,

BALTIMORE.

S. SANDS MILLS, } PUBLISHERS AND PROPRIETORS.  
E. WHITMAN, }

BALTIMORE, OCTOBER 1, 1864.

TERMS OF SUBSCRIPTION :

\$1.50 per annum, in advance.

6 copies for \$7.50—10 copies for \$10.

*And one copy to the getter up the club.*

TERMS OF ADVERTISING :

For 1 square of 10 lines, or less, \$1 for each insertion.

1 page for 12 months.....\$100 00

1 " 6 " ..... 60 00

1 " 12 " ..... 60 00

1 " 6 " ..... 35 00

1 page Single insertion,..... 15 00

and \$10 for each subsequent insertion, not exceeding five. Cards from 10 to 12 lines, yearly,

\$10—half yearly, \$6.

To ADVERTISERS.—Our friends wishing to use the advertising columns of the "Farmer" will please send in their copy by the 25th of each month, or earlier, if practicable, as we desire to put the Advertising Sheet to press in time to enable us to be out a few days before the first of the month. Our rapidly increasing circulation require us to go to press earlier than heretofore.

ERRATA.—On page 303 of this number, in the line under the engraving on the same page, instead of "Devon" read "Durham."

JOB PRINTING.

If our friends, either in the city or country, are in want of Printing, we respectfully ask a call at our office, No. 24 S. Calvert street, where we are prepared to execute all descriptions in good style and at market prices.

CIDER MILL SCREW.—Parties in need of this article, either farmers or merchants, are referred to the advertisement of the "Seneca Falls Pump and Fire Engine Company," J. A. Rumsey, Treasurer—located at Seneca Falls, N. York. They claim it to be the best in the world.

THE CULTIVATION OF FRUITS---LARGE AND SMALL.

It may strike the reader as a remarkable fact, but it is true, nevertheless, that thirty years ago orchard and small fruits were more abundant in the Middle States, in proportion to the existing population than they are at the present day. We will not say that there has been great neglect on this score, because fruit was then so cheap in the market that it scarcely paid for the gathering, and therefore men who did not look to the future—how few of us are there who do?—saw with comparative indifference, their fine old orchards go to decay without making any attempt at renewal by planting young and thrifty trees to come into bearing about the time when it might reasonably be expected that the old ones would have died out. The causes for this, may be traced to the impatient spirit of our people; the facility and frequency with which farms change hands with us, and, until recently, the small profits derived from cultivating even our best lands. Our farmers did not like to spare the money and labour required to plant out new orchards from which they would derive no revenue for at least eight years from the time of planting all the large fruits, except peaches—four years for a crop of peaches, raspberries, gooseberries, currants, or grapes, and two years for strawberries. Beside this, they reasoned—most unwisely, it is true—that in the course of eight or even four years an opportunity for selling the homestead at a slight advance might occur, and as it is rare with us even in the rural districts, for families to remain many years fixed to the same spot, they regarded the expense of raising fruit trees for the benefit of those who should come after them to be a waste of money and of precious time. We do not, of course, assert that all of them have been influenced by these feelings, but we well know that such motives have actuated very many of them. The case is different now, and promises to be so throughout all the future. The demand for orchard and small fruits is annually increasing, and owing to the new system of canning them for sale, and the immense business in this line that has already sprang up, the supply for years yet to come will scarcely keep pace with the amount required for domestic consumption and for exportation. The putting up of hermetically sealed fruits is a comparative new branch of business, yet it has been extended within a year or two with such unexampled rapidity, that the annual sales amount in the aggregate to several millions of dollars. Here then is the opening which the fruit grower has long looked for in vain. He can now be certain of a market for his fruits at remunerating prices, and has no reason whatever to fear that the market will be overstocked. We hold that fruit orchards, large and small, when properly cultivated,

can be made infinitely more profitable than the cultivation of cereals, and the fact that it need not interfere, to any serious extent, with the general work of the farm, is one potent reason why fruit should be regarded as a valuable auxiliary, and as adding largely to the income of the proprietor.

But there is no reason why the cultivation of fruit for market purposes should not be made a special business—to the exclusion of all other tillage, with the exception of sufficient grass and grain, to supply the family with flour and meal, and to feed the stock kept upon the place. Small farms, within easy distance of populous cities, either by pike, or rail, or water, if devoted wholly to fruit culture, would pay annually a handsome interest on the investment, and the business is one which is not laborious. In the Middle States, the soil and climate are both admirably adapted to the growth of almost all kinds of fruit. Pears, plums and gooseberries may not do as well perhaps as if they were grown farther north; but other fruits—apples, when the kinds are properly selected, peaches, grapes, cherries, damsons, currants, raspberries and strawberries, flourish better with us than in any other section of country. Nor need there be any objection made on the score of having to wait for so many years in regard to the larger fruits until they come into bearing. To maintain young orchards in a vigorous growth, it is absolutely essential that they should be cultivated.—This tillage, whilst it adds to the vigour and health of the young trees, may also be made profitable. Corn, potatoes, and indeed every species of hoed crops, may be grown upon the land, care being taken not to injure the trees, and the soil being kept rich by frequent manurings. If plantations of grapes, raspberries, gooseberries, currants and strawberries, are formed, all except the last mentioned fruit, should be set out in rows sufficiently wide to admit of tillage in root crops for the purpose of economizing the land, and, at the same time, of keeping it clean. We assert, from experience and observation, that twenty acres devoted to fruits, with skillful culture and with proper care and attention, will yield, one year with another, a larger net profit than one hundred and fifty acres when cultivated in cereals and the grasses. There never was, in our opinion, so fine an opportunity for growing fruit for a market as is offered at the present day, now that, to the usual demand for the table is added the enormous demand for putting up in hermetically sealed cases. We heartily commend this matter to the thoughtful consideration of our readers.

**LABOR—ANCIENT AND MODERN.**—The great Egyptian pyramid cost the labor of about 200,000 men 20 years; the same amount of labor could now be performed by 20,000 men in five years.

## SHELTER FOR SHEEP.

There is no season of the year when sheep are more liable to lose all they have gained, than during the fall and early winter; and if they do, there is an end to the hopes of a crop of wool. For the want of food has the effect of stopping the growth of the wool, and the moment the growth is stopped the end of the fibre is completed; a change takes place, it becomes dead, in a manner analogous to the stem of ripe fruit, and a renewal of good feed after these months, and after the growth of the wool has been once stopped, only prepares the skin for a new growth that pushes off the old fleece, and causes it to be lost before shearing time. Nothing is more evident from this than that the economy of the wool-grower consists in keeping his sheep well fed during the early part of the winter, and also well protected from storms; for it is plain from the fact that wool begins to grow, even on poorly kept sheep, as soon as the temperature of spring permits the animal economy to divert some of the supplies from being consumed in keeping up the vital organization, to the increase of the fleece, that heat has as much to do with the growth of wool as with the growth of plants. Hence we say give sheep protection at an early date.

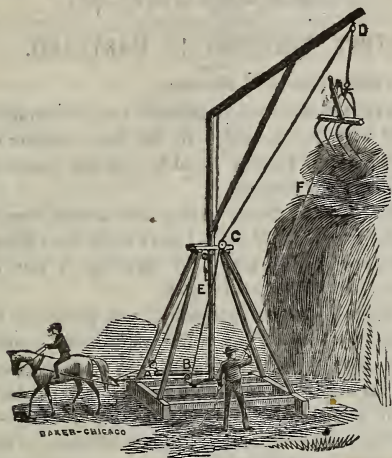
## Sets of the "Albany Cultivator" and "Downing's Horticulturist" For Sale.

Two very valuable Agricultural and Horticultural work, are offered for sale in our advertisement columns. The first consists of a perfect set of the ALBANY CULTIVATOR from the year 1834 to the year 1857, inclusive, (wanting the volume for 1851,) and comprising 21 volumes in all, well bound in muslin. The second is a complete set of DOWNING'S HORTICULTURIST, from its commencement in 1846 until the year 1858, (8 vo., in muslin.) It numbers 13 vols. In addition to a vast variety of valuable and interesting matter from other hands, the last mentioned work contains all of those fine essays of Downing's on Horticultural and esthetic subjects, which have been collected, since his death, into an additional volume, and which are regarded as among the best of all his writings, as they are certainly the most varied and instructive. We commend both of these works to the attention of gentlemen whose libraries are deficient in them, being well satisfied that they will find them admirable as works of reference and pleasant and profitable reading. These volumes can be examined at our Rooms, 24 S. Calvert street.

Those of our subscribers in need of well grown Fruit Trees, such as Apple, Pear, Cherry, Plum, Peach, Apricot, Nectarine, Quince, Fig, &c.—or Native Grapes, Strawberries, Currants—Roses—Evergreen Shade Trees—Flowering Bulbs, &c., are referred our friend John Saul's Nurseries, Washington City, D. C., where all these can be obtained and of good quality. See advertisement.



## PALMER'S PATENT DERRICK.



The rapid introduction of the horse pitch fork has stimulated inventive genius to seek for the easiest and most convenient method for using them. In field stacking with the simple pole derrick, it has been very difficult to prevent the rising forkful of hay from dragging on the side of the stack. In the improved Derrick, as shown above, the crane part is swung around to the load of hay, the fork full is raised perpendicularly from the load, to any desired height to 25 feet, and by a simple contrivance of weight and lever attached, the crane is made to swing around over the stack or rick, depositing the hay just where needed, without in any manner disturbing that already deposited. With Palmer's Excelsior Fork it makes a very complete arrangement for stacking hay or straw.

The following is an extract from the Messrs. Palmer's pamphlet, in relation to their Hay Stacking Machine and Fork. The Fork we are acquainted with, and know it to be a very superior article, and as an evidence of its appreciation by the farmers we may state that large numbers have been sold in this market the past season, all giving general satisfaction:—

"By the use of this Stacking Machine and Fork a man and two boys will stack more hay in a day than six men can by hand, thereby saving the labor, of the hardest kind, of three men, and frequently secure a great deal of hay from the rain, which otherwise would spoil. This Stacking Machine is the only one before the public that will elevate the hay perpendicular so as not to swing against the stack while going up, thereby dragging up the hay and making a homely stack. It is impossible for this to touch the stack or rick at all. By changing the pace of the horses you can swing the arm of this machine twenty-four feet which enables a man to stack more hay in a day than four men could do and have the hay dropped on the edge of the stack. The Excelsior drops the hay on the stack or rick as flat as it lay on the land and by this Derrick or Stacker you can carry the hay to any part of the stack."

This Derrick was recently patented. Any information desired can be obtained of T. G. & M. W. Palmer, box 6168, Chicago, Illinois.

## The New England Fair, at Springfield.

The exhibition of this association came off, as announced, on the 6th and 9th of September. The weather was fine, the attendance large, the receipts heavy, and as a whole was considered as a decided success. The display of agricultural implements and machinery is said to have been the largest ever on exhibition at any one place in New England—including every description of labor-saving tools and machines.

The trot for the Society's purse of \$400 came off on Wednesday, the second day. Four stallions were entered, viz:—"General Knox," "Draco," "Volcano," and "Duke of Wellington." General Knox won in three straight heats—time 2.31½, 2.37, 2.43½.

"THE WESTERN RURAL."—We have received several copies of this new agricultural weekly, which has taken the place of the "Michigan Farmer." It gives promises of being a valuable co-laborer in the cause of agriculture, &c. It is neatly printed, and published at Detroit, at \$2.50 per year, and \$2 in clubs of 20. We wish it a full measure of success.

## RECEIVED.

From Edward J. Evans & Co., Central Nurseries, York, Pa., their wholesale catalogue of Fruit and Ornamental Trees, &c.—it comprises a large and choice variety of Apples, Pears, Cherries, Grapes—Ornamental Evergreens and Deciduous Trees—Ornamental and Climbing Shrubs, &c. These nurseries are well known to the public.

From T. G. & M. W. Palmer, of Chicago, Illinois, their pamphlet descriptive of the Palmer's Hay Fork, and Hay Stacking Machine—also, Victor Hay and Straw Cutter—Sulky Hay Rake—Sulky Corn and Grain Cultivator, a novel implement—also Patent Hay Loaders, Threshers, &c.

From Cowing & Co., Seneca Falls, New York, their large Illustrated Catalogue of Pumps, Fire Engines, Hydraulic Rams, Sinks, Bells, Screws, &c. Also from the same firm a Circular of a newly patented Wood Pipe and Couplings, suitable for all kinds of pumps, &c. This invention will prove of great economy in these times owing to the high price of all kind of metallic pipes, which it is intended, in a measure to supersede. The inventor holds that it is equally durable as other pipe. In a future number we may speak of this wood pipe more fully.

"OUR TRAVELING AGENT," a neat monthly, published by the "Seneca Falls Pump and Fire Engine Manufactory Company," at Seneca Falls, New York. It contains a variety of reading matter, with advertisements and illustrations of articles of their own manufacture.

From "The American Bee-Hive Company," of Nevada, Ohio, a copy of "The Bee Keeper's Text Book, or Facts in Bee Keeping,"—by N. H. & H. A. King. We will notice more fully in our next.

WHAT IS A QUARTER OF GRAIN?—A speaker at the Corn Exchange Meeting in London, gives the following standard weights to the quarter of 8 bushels of the different grains: Wheat, 496 lbs. to the quarter—equal to 62 lbs. per bushel; barley, 400 lbs. to the quarter—equal to 50 lbs. per bushel; oats, 320 lbs. to the quarter—equal to 40 lbs. to the bushel.

## THE CROPS.

A supplementary report by the Commissioner of the Department of Agriculture at Washington, states that Spring Wheat this year will be less than an ordinary crop by about three fourths of a tenth, or  $7\frac{1}{2}\%$  cent. It is believed that the amount of old Wheat on hand may make up these deficits, but what this amount is will appear from the returns to circulars just issued. The Corn crop promises to be a full average since the August rains throughout the great producing States of the West. The want of old Corn will render the farmers entirely dependent on the new crop for fattening purposes, and the want of fruit in the Western States would have obliged that portion of the Country to rely still more on their wheat for food, in the event of a short crop of Corn or Potatoes. Hence the anxiety pending the drought. The *Tribune* of 13th Sept. has a voluminous array of crop figures, which go to show that though the drought and diminution of labor have undoubtedly lessened, to some extent, the yield of all the leading staples, yet the crops throughout the Great West have turned out so well as to put at rest all apprehensions of anything like a short yield, and of scarcity even for the unusual needs of such a year as this. As the agricultural resources of the Country are now pretty definitely ascertained to be equal to the wants of home consumption, and something to spare, for needy foreign Countries, speculation in Breadstuffs, with the view of carrying up prices inordinately, has come to be considered extra hazardous, and therefore ceased nearly altogether.

In order to afford some idea in regard to the magnitude of the crops, and the progress of agricultural development in the Loyal States, we submit the following figures from an authentic source:

Productions	1859.	1862	1863
Wheat.....bus.	138,000,000	189,000,000	191,000,000
Oats.....	152,168,000	172,520,000	174,858,000
Rye.....	18,792,000	21,254,000	20,798,000
Barley.....	15,433,000	17,781,000	16,760,000
Corn.....	547,029,000	586,704,000	452,446,000
Potatoes.....	107,337,000	114,533,000	101,457,000
Tobacco.....	230,343,000	208,807,000	267,302,000
Hay.....tons.	19,073,000	21,500,000	20,000,000
Wool.....lbs.	50,083,000	60,744,000	79,405,000

It will thus be seen, that there was a very large increase in the product of all the crops enumerated in the year 1862 over 1859, notwithstanding the existence of the war; and that there was also a very marked increase in the articles of Wheat, Oats, Tobacco and Wool, produced in 1863, (the third year of the war) over 1862; which increase would doubtless have also extended to all the other crops, but for the occurrence of unusual drought and frosts. The State of Iowa, which, out of a population in 1860, of 275,000, furnished to the Federal Army from May, 1861, to the end of 1863, 52,240 men, nevertheless increased her number of acres of improved land from 3,445,000 in 1859, to 4,700,000 in 1862, and 4,500,000 in 1863; and her product of Wheat from 8,795,000 bushels in 1862, to 14,592,000 in 1863. In 1859, the amount of Wheat raised in the State of Indiana, was 15,219,000 bus.; while in 1863, notwithstanding the State out of its population in 1860 of 1,350,000, had furnished to the army more than 124,000 fighting men, the annual product of Wheat exceeded 20,000,000 of bushels. Nor are these facts concerning Iowa and Indiana remarkable, as they most certainly are exceptionable; for although exact statistics on this subject are not readily available, yet enough is known to show that the products of industry have increased in all the Loyal States during the war, notwithstanding the constant draughts that have from time to time been made upon the numbers of their producing classes.

## COMMUNICATED.

## STOCK BREEDING IN MARYLAND.

To the Editors *Maryland Farmer* :—

I have read with much pleasure the communication of "Thorough-bred," in the June number of the "*Maryland Farmer*," and for one feel disposed to profit by his remarks.

The subject of Stock raising has always been a favorite with me, although I have never been situated so favorably as many for carrying it out in practice so well as I could wish.

In order to do this successfully and profitably in Maryland, we should, as "Thorough-bred" recommends, lay our arable lands down to the best grasses—a variety of them—and when this is done, keep them in good condition by top-dressing liberally.—Make the surface smooth and use machinery to cut and gather in the hay.

The improvements made in machinery, for this purpose, within a few years, are wonderful. Why sirs, haying is becoming, instead of the most severe part of the year's labor, almost a pastime. Give me a full suite of modern haying machinery and I will, with a boy and a span of good horses, or mules, engage to mow, spread, rake, pitch into the cart, and pitch from that into the barn, more hay in a given time, than a dozen men can in the old way, be they black or white. This is sober truth.

The improvements in the mowing machine have brought it very nearly to perfection in its operation. Then comes the hay-tedder, or spreader, by which a man and two horses will spread the grass when cut, faster and better than ten men can do it. Then we have the several kinds of Horse Rakes which will easily and rapidly gather it into winrows. Next, a machine has been recently put into operation, which, I am told (I have not seen it myself) will load the hay from the field into the cart as fast as two hands can stow it.\* It works by means of horses walking, one on each side of the winrow, drawing the cart, to which is attached a rake and straw carrier, which gather the hay up and deposit into the cart, then, when it arrives in the barn the Horse Pitchfork takes hold and puts a whole load just where you desire it in ten minutes. Only think how many hands and how much hard manual labor can be dispensed with by using these appliances for haying; And to use them, it is not necessary that your land should be level, but you must have the surface smooth.

Many other branches of farming can be equally as much facilitated by the appropriate kinds of ma-

\*NOTE.—See description and engraving of Bentley's Hay Loader, on page 301 of this number, which we presume is the machine alluded to by our correspondent.—ED. FAR.



chinery. To speak of these now, would lead me into other topics, so I will defer it to some other opportunity and "return to our mutton."

The raising of Horses, Cattle, Sheep and Swine must, of necessity, be a profitable business for many years to come. "Thorough-bred" goes into some discussion respecting the different breeds of cattle, horses, &c., and states his preferences. It is well for us, Messrs. Editors, that there are different races and breeds of cattle, and other stock, for neither he or any one else can find all that our wants call for combined in one animal, or in one hide. I heartily agree with him, however, in the sentiment that, whatever breed you may select, *be sure and have pure bred animals*. To this I say, amen and amen.

Don't let us breed mongrels. Cast about in your mind which of the different branches of Stock raising, and what breeds will best suit the capacity of your farm, and your own taste. This being settled in your mind, go ahead vigorously, hopefully and energetically, and breed true animals, and let the world know that what you do breed, is thoroughly and surely and purely what it purports to be. Then will your stock have a reliable reputation in the markets. Another thing I would urge is, that you do not mistake the powers of your farm, and stock it with what it cannot sustain either as to kind or numbers. I have blundered in that way myself, in years past, to my cost and damage, and you will permit me, I hope, to give the advise of a little costly experience. Artemus Ward says, "Experience is a good schoolmaster, but he charges *orful* high wages." Perhaps I can save you some of these charges.

"Thorough-bred" speaks approvingly of the Durhams. So do I, for certain purposes and places.—But I couldn't breed them with profit, because my farm will not admit of it. To carry Durhams along to perfection you must have "fat pastures" and an "inexhaustible meal bag." Now I have neither, and a Durham in my barn yard would become "bony, gaunt and grim," and not the grand and stately animal he is when full fed. So I content myself with Devons and Alderneys—the Devons for work and beef, and the Alderneys for cream and butter. I agree with him most cordially in another sentiment he advances, when he says, "purity of blood (no matter what stock you raise, be it even hogs,) better housing in winter, and higher feeding the first year, are the only foundations for the successful raising of stock." Truth—every word of it. Let the young farmer—and the old one too—commit that sentence to memory. Let them make a motto of it and write it in large letters, in stall and stable, viz:—

*Purity of blood—good housing in winter—full feeding the first year, and good feeding ever after.*

It has been the neglect of these principles that has brought Maryland in the back ground, and caused her to lose grade from the stand she formerly held in this respect; and it must be the rigid and unswerving practice of them in the future that will bring us up again. There is nothing hard or difficult in doing this.

It is just as easy, and much more pleasant and profitable to do it than to follow the opposite, careless, slipshod, helter-skelter system.

Although we are behind in these things—perhaps unpardonably so, yet I am glad to say that we have within our borders the elements and the material from which to breed in purity almost, if not quite, all kinds of farm stock—whether horses, cattle, sheep or swine—whether race horse or trotter—Durham, Hereford, Devon, Ayrshire, Alderney or Gallo-way—Merino, Southdown or Shropshire—and of Porkers too many breeds, from Suffolks to Land pike. What then is needed? Nothing but courage and energy to adapt ourselves to the times—to adopt a system of plan and action in managing, and indefatigable perseverance in accomplishing what we undertake. Do this and Maryland is herself again. Yours, PHIL. TAURUS.

THE SKUNK.—The skunk will, now and then, eat a chicken—but very rarely. What does it live on then? Beetles, crickets, grasshoppers, mice, etc.—Recently much has been said about this animal—and we are glad to see mostly in its favor. The skunk is a benefit to the farmer; and not a single one should be killed, unless it gets to chicken thieving, which, of course, is not very pleasant. And then the chickens should be taken care of rather than the skunk. If you do not hurt it, it will not hurt you; and it will weed your ground of insects, and charge you nothing for it. One of our exchanges calls it the "farmers' friend."

The strongest man feels the influence of woman's gentlest thoughts, as the mighty oak quivers in the softest breeze.

#### The Public Debt.

The progressive increase of the public debt, of all descriptions, since the 5th of July, when Mr. Fessenden took charge of the Treasury, is as follows;

	Principal.	Interest.
July 5.....	\$1,792,867,040	\$73,425,240
July 12.....	1,795,033,569	73,752,554
July 19.....	1,796,208,366	74,758,047
July 26.....	1,805,523,564	73,650,529
Aug. 2.....	1,837,492,170	76,418,305
Aug. 9.....	1,832,649,335	74,871,669
Aug. 16.....	1,964,714,555	76,088,165
Aug. 23.....	1,859,274,374	75,500,069
Aug. 30.....	1,878,565,234	77,447,122

Increase in 56 days. \$85,698,194 \$4,021,882  
Average daily increase of principal..... \$1,530,032  
Average rate of interest per annum, 4.17 per cent.

## Horticultural.

### HALE'S EARLY PEACH.

I send to you a few specimens of Hale's Early, also a specimen of Troth's Early Peach. The latter variety being the earliest and most valuable market peach known for the last fifteen years.

We now have the Hale's Early, produced by a German in Ohio, that ripens so long before the Troth's Early that it must prove of great value to the Peach-growers throughout this country, by adding some two or three weeks to the first part of the season. The fruit I send you I grew in my orchard house. I took great care to give both kinds an equal chance; I placed them side by side so that they should receive the direct rays of the sun alike. The difference as to time of ripening you can judge. The first ripe Hale's Early fell from one of the trees on May the 8th, and they continued to ripen from that time till now, this being the last picking.

ISAAC PULLEN, *Hightstown, N. J.*

The Peaches were superior, and fully sustained the excellent character of this variety we have so often given in our journal. It is undoubtedly the most valuable addition the peach list has seen for a long time.—[*Ed. Gardener's Monthly.*]

**RAISE BLACKBERRIES.**—A neighbor set four plants of the Lawton variety in one corner of his garden four years ago. They have had no care, have spread rapidly, and though now occupying about four by twenty feet, he this year, estimated the value of the fruit at \$10. Some of the canes are 12 feet high—or would be if not borne down by the weight of the fruit—and are by far the most profitable growth of his garden. Go reader, and do likewise—that is, plant at least one dozen of this, or some other good sort of blackberry this very Fall. They can be obtained at moderate cost from any nurseryman. In addition to the various methods of using blackberries, they are reported by those who have tried them; as a good substitute for raisins, when dried.

**FRUIT FOR FARMERS.**—The strawberry plantation, the grape, the currant; the gooseberry, the raspberry and blackberry patches, belong to all well cultivated and conducted farms. We do not wish to be understood as saying that a farm may not be well cultivated without them; but we do wish to impress the fact that it cannot be well conducted if no regard is had to the health and rational enjoyment which these fruits yield, where they are supplied to the farmer's family regularly and fresh from vines and bushes in such quantities as may be daily consumed.—*Ex.*

### THE PLUM-TREE WART.

From the fact that the larvæ of the curculio are often found in the singular excrement called the black wart or knot, it has been inferred that this insect is the originator of the injury. E. Low, of Bangor, Me., writes to the *Gardener's Monthly*, that he, several years since, adopted the plan of picking up and burning all the plums which fell from being bitten by the curculio. By this means he has obtained fine crops of plums, free from the attack of the insect. But he has found the wart or knot more troublesome. He says he has made it a rule to cut it out on its first appearance "never leaving it on the tree over night; yet in the entire absence of the curculio on the fruit, I have had to use my knife on the knot more or less since March." The editor of the publication above named says: "Many different insects have been raised from larvæ found in the plum knot. The peach borer and the plum curculio are very frequently found. In other galls but one insect is found, evidently the one that formed it.—The fact of so many species being found on the plum knot, would seem to indicate that they instinctively feel that they have as good a right to the knot as the curculio."

**BLIGHT ON PEAR TREES.**—I see some of our eastern fruit growers have come to the conclusion that there is no cure or preventive for the pear blight. Tell them that at the first sign of the blight to wash the tree well with good soft soap, and it will effect a cure; and if they will wash them every spring it will prevent its appearance altogether. Five years ago I cured some trees that were quite badly affected; and lost one in consequence of not attending to it in time. Soap-suds sprinkled over the trees in the spring will prevent the bugs from destroying the young leaves, and leave the tree in a healthy condition. It is one of the best fertilizers for young trees that we have.—*Cor. Rural American.*

**BUDDING.**—Downing says the "proper season for budding is from the first of July to the middle of September, the different trees coming into season as follows: Plums, Cherries, Apricots on Plums, Apricots, Pears, Apples, Quinces, Nectarines and Peaches. Trees of considerable size will require budding earlier than the young seedling stocks, but the operation is always, and only performed when the bark of the stock or parts separates freely from the wood, and when the buds of the current year's growth are somewhat plump, and young wood is growing firm. Young stock in the nursery, if thrifty, are usually planted out in rows in the spring, and budded the same summer or autumn."

Never relate your misfortune, and never grieve over what you cannot prevent.



### Fall Planting of Trees.

Mr. Fullerton, of Brooklyn, says that he would plant all kind of trees in Autumn. If the work is well done the trees would grow one-third more the next summer, if planted in Autumn than they would in Spring. It is the same with vines. He planted one last Autumn, which has made a growth of ten feet, and another of the same sort, planted in the same soil, with the same treatment in the Spring, made a growth of only four feet. He declares that he would prefer to plant a vineyard in Autumn, and as for fruit trees, if he could not set them in place, he would take them from the nursery and heel them in, because the roots in that situation undergo a preparation for the great change. It is true that in high latitudes it might not be as safe as there, to plant an orchard in Autumn.

Mr. Carpenter, of N. Y., says that Autumn planting can not be recommended in any place, unless in very dry soil. In consequence of bad planting within his own observation, he estimates that not more than one-fourth of the trees have lived to bear fruit.

So the doctors disagree, and yet both may be right.—*Ohio Farmer.*

There is no case in which fall planting of trees, &c., would be bad policy, except where the water is liable to stand in the winter season, in heavy rains, or thaws of snow, which would injure trees and vines before their roots become fully set in the soil, drawing nourishment therefrom.

**SAVING GARDEN SEEDS.**—Every person should make it a point to save seeds of all such good varieties of plants and vegetables as they raise or desire to raise. If the seeds ripen well upon their own plants they have only to select the best specimens, and after carefully curing them in the shade, put them away in a dry place where they will not be destroyed by vermin. Those who do not raise varieties which they desire to obtain can generally get seed of some of their neighbors. All seeds thus laid by for use should be immediately labeled with the name of the variety and the year of its growth.

**THE NEW YORK "CENTRAL PARK."**—More than 79,000 trees, shrubs, and herbaceous plants were planted in New York Central Park last year. The carriage drive now completed is about eight miles in length; bridle-road five miles, and walks twenty miles. Over 4,000,000 persons visited the park in 1863, and in one day over 8,000 carriages entered the drives.

An agriculturist in the Duchy of Holstein is stated to have discovered a remedy for the potato blight. Before planting the tubercle he washes it in chlorine water, and then lets it dry in the sun. He has, it is said, tried this method for three years, and always obtained sound potatoes.

## The Poultry House.

### CARE AND MANAGEMENT OF POULTRY.

Poultry raising is very interesting, and it is exceedingly convenient at all times to have chickens, which can be killed and put on the table so quickly on the arrival of unexpected visitors, or in case of sickness. What a delicacy for the invalid or those in a state of convalescence, while for a party, how well the turkey of 20 pounds and the goose of 12 or 15 pounds sets off the hospitable board, besides the profit of having, at all seasons, varieties for sale.

Like all other kinds of live stock, early reared young ones pay best, for spring chickens make double the price of later ones, and the pullets saved for laying will commence when eggs are scarce, and as they do not molt the first fall, will, with good feeding, keep on, and where it can be contrived for hens to roost over any warm place, as for instance where, by tubes or natural ascent, the breath of cattle will go to their apartment, they will not cease laying entirely in the coldest spells.

By managing to have the young broods where none of the old fowls resort, and not confining them to the same spot of ground after they have soiled it with their dung, very pleasing results will follow, for more than half the losses of the feathered tribe occur through keeping the coops so close together, and so long in one place—have no bottoms in them, and daily move on fresh ground; then the broods will be sweet and clean, always healthy, and will grow as fast again.

When the hen deserts her young it is best to have them roost apart from the general stock of old fowls, to escape the perpetual pecking and worry which occurs when chickens first go among the hens; any place that is safe from vermin will do by placing a few sticks for them to roost on, as their welfare is the same in a common shed as in the finely built poultry house of the wealthy, and very much greater than in many gentleman's places where the range is limited. Where great numbers of cattle are wintered, the buildings are extensive and the premises have litter, horse dung, &c., here and there in different parts—it is at such homesteads poultry may be kept ten times as numerous as where they are restricted to particular quarters, for it is their own droppings which to them poison the ground and the atmosphere, but the more of other animal manure they have access to, and the less of their own lying about where they feed and resort, the better.

Don't coddle the young turkeys too much; don't have any kind of fowls always round the kitchen door; a few steps farther to feed will be well taken, and don't begrudge food and give too much sop to young or old. The digestion of poultry is stronger than a millstone.—*Country Gentleman.*

## Grape Culture.

### GRAPES—THEIR CULTURE.

Now is the time to prepare for planting a vine.—If you intend to do it next spring, you must get ready this fall. Perhaps the following items will stimulate you. The first is from the Philadelphia *Ledger*. Its advice suits other localities:

*Grape Culture in Cities.*—Every year, as this season comes round, those who have in former years planted good vines rejoice that they have done so; and those who have not, become sensible of their loss. There is not a man with a yard ten feet square, on which the sun shines, but might plant a vine to advantage. It is the best of all fruit for city cultivation, because it can be trained to grow just where the owner wishes—just where he can get the fruit and no one else. There are many persons who say that it is far cheaper to *buy* the grapes than to go to the expense of planting, and having a gardener three or four times a year to attend to them. But such persons have never known the luxury of sitting under *their own* vine, and watching the fruit ripen day by day, and plucking the ripe clusters just fresh as wanted, and without any stint from having to pay so much per pound. Many tenants think it not worth while to plant, when they may move in a year or two, and others reap all the advantage; but if every tenant would plant, all would soon reap the benefit. No doubt every landlord of a rented house would find a well-planted vine of the right sort so great an advantage on any premises, that it would enable him to obtain a better rent, or often to retain a desirable tenant. On this ground it would be worth while for every owner either to plant or encourage the planting of so grateful a luxury.

Within a few years the progress of grape culture has advanced astonishingly. Formerly only the Isabella and Catawba grapes were at all generally known; but now there are so many new and superior varieties, well tried and easily obtained, and quite capable of standing the climate of Pennsylvania without protection, that it is unpardonable not to procure some of those natural pleasures prepared for us by the hand of the Great Architect of Nature. The Delaware grape is by the best judges considered superior to any other of these hardy varieties, and its sweetness of flavor, hardness, and early ripeness, render it unquestionably the most desirable for general cultivation. It is so superior to the Isabella that those who have once tasted it will desire to have their old fruit superseded by the new; and unless it were for the size of the fruit, it might be expected that in a few years the growth of the Isabella would be in danger of falling altogether in neglect. The

only grape not cultivated in the hot-houses which could at all compare in point of flavor with it, is the Diana, supposed to be an early seedling of the Catawba, possessing not quite its size, but much of the same richness of flavor, and in ripening so much earlier, and in such close, handsome clusters, that in many respects it about competes with the Delaware.

There are two systems of cultivating the vine; one, that adopted in Germany, of trimming the vines very short round an eight foot pole, which has the effect of increasing the size of the bunches very greatly, the strength which would have gone into the formation of wood being all thrown into the fruit. Some, however, think that this system takes somewhat from the fineness of the flavor of the best grapes. The other method is to let the vine send out its branches through as great a length of wood as possible. This both produces more grapes to the same number of vines, and is supposed to leave the flavor less gross and more delicate. There is no reason why most men should not plant one vine, and train it low and trim it short, and another vine trimmed long, and accessible from the second and third stories.

It is hardly possible for the vine to be too highly nourished; the very richest soil and the strongest manures answer best, and it converts them into the richest and most delicate tasting fruit. By a little care, grapes can now be readily preserved by almost any housekeeper from the fall to the following spring; so that at any time through the long winter, and sometimes as late as April or May, in case of sickness or friends, this fruit, fresh and in all, or nearly all, of its first rich flavor, may be easily secured. The Isabella grapes are said to keep best of any if gathered not too ripe and sealed at the end of each stalk when gathered from the vine, and hung in a room of the right temperature and moisture, or packed in barrels of clean bran or saw dust.

THE DELAWARE, the hardest of all varieties to propagate in the open air, we have succeeded in growing admirably, the single eyes, set horizontally in May, in a cold, clayey soil half an inch below the surface, and covered an inch above the soil with ———. We are not prepared to give full publicity to our process, till tried another season; suffice it to say, at present, that we can show 250 Delaware vines, thus propagated, growing finely, with good roots, in a row 30 feet long, and 8 inches wide.

This method of propagating grape vines from single eyes in the open air, appears to have been considered by horticulturists as impossible, as the *Gardener's Monthly* lately alluded to it as a discovery in France! We have propagated vines in this way for ten or more years. Where water is easy to procure, we should not cover the eyes over one inch deep with soil, when nothing is placed over that.—*Rural American*.



## THE DOOR.

The pleasant doors I've entered!—in the days  
 Of old. The young  
 Hearts I met within them! Go your ways  
 Open and tongue,—  
 Let the heart, only, murmur out their praise;  
 Wide open flung.

They welcomed me within them,—door and heart;—  
 O'erhung with vines  
 The cottage door is sweet: where flowers upstart  
 At morn; where pines,  
 Æolian, song; and rills and birds take part,  
 As day declines.

Faith, Penitence, Humility and Peace;  
 Not alone in  
 Rural doors they dwell; their growth and province cease  
 Not mid the din  
 Of cities; from what do hearts there seek release?  
 The troubler, *sin*.

Enter this princely door,—in the great town;  
 Hearts, it may be.  
 And gentle forms, will meet thee,—without frown;  
 Yes, love met me,  
 Here. Peace be to this house. I'll write down,—  
 "Peace be to thee."

One door there is more dear than all the rest;  
 The smiles I meet,  
 As, tired, I come to it, a welcome guest,  
 Than all more sweet;  
 Here, truest hearts within the noblest breast  
 For me doth beat.

Who smiles this welcome? Whose this truest heart  
 That runneth o'er  
 With love? The answer hath no counterpart;—  
 Hear it once more—  
 Sweeter than voice of nature or art—  
 "I AM THE DOOR."

The heavenly homestead seemeth near. The door  
 Wide open swings;  
 Dearest, I've said, of all I've known before;  
 Here my heart clings;  
 Here Hope springs, Sorrow sinks, and Joy once more  
 Mounts up with wings.

"The Door!"—and home—and rest. On summer eves,  
 'Mid winter's sleets,  
 When friends smile, or foes look dark, here peace leaves,  
 Always, its sweets,  
 In human hearts. Here buds, leaves, flowers, fruits, sheaves  
 At once man meets.

## GOOD NIGHT.

Downward sinks the setting sun,  
 Soft the evening shadows fall;  
 Light is flying,  
 Day is dying,  
 Darkness stealth over all.  
 Good night;  
 Autumn garners in her stores—  
 Foisson of the fading year;  
 Leaves are dying,  
 Winds are sighing—  
 Whispering of the Winter near.  
 Good night!  
 Youth is vanished, manhood wanes;  
 Age its forward shadow throws;  
 Day is dying,  
 Years are flying,  
 Life runs onward to its close.  
 Good night!

## WOMAN AND HER TOILS.

The following sketch of "Woman and Her Toils," which we find in one of our exchanges, is so truthful that we give it to our readers as worthy a careful perusal.

Shall the wife that is to be the *mother of your children* be treated with less care, kindness, and attention than the animals in your flocks and herds, from which you expect to rear stock of an improved race? Shall the lower order be cared for, and the higher forgotten or slighted? The picture in the sketch is too true. Study the Laws of Life, of Creation, become a student in Physiology, and the evil which now crushes woman, the *cares of life*, which is the true cause of the half-made up creatures, the sick, the pale, puny, consumptive creatures we call human beings will cease to be born, and in their stead, children will people the earth, who, when they come upon the stage of active life, will stand erect in all the grace and beauty of perfect men and women.

Here is a picture of many Homes, that for want of serious reflection will soon be desolate. The italics in the extract are ours.

"What a mysterious Providence! say the farmers' wives, as they come together to look for the last time on one of their number; and they glance pityingly on the bereaved husband and the family of children, varying in size from the tall youth or blooming maiden, down to the little child. Truly it is a mystery that she should be taken away in the prime of life when her children need her watchful care and counsel more than ever before. But let us examine into the life led by many farmers' wives, and see if we can gain a clue to this mysterious Providence, which so often leaves the family circle desolate.

"A young farmer marries, and for a year or two his wife can do very well without help; but by and by his work is too much for him alone, and he must have a hand; and, one by one, little children increase the family, until the wife's burden is much heavier than when she took it up. But he is just getting a start, and if they want to get rich—as everybody does—they must economise, so *she* 'gets along, without help. She rises early, milks the cows, gets breakfast (often for several men), dresses the children, washes dishes, skims milk, churns, perhaps sweeps rooms, makes beds, prepares dinner, cleans up, snatches an hour to sew, keeping a restless baby quiet meanwhile, gets supper, milks again, puts the children to bed, and after they and the husband are asleep, resting from their weariness, sits up to sew, that she may save paying a seamstress.

"In addition to this daily routine, she does all the washing, ironing, baking, scrubbing, house-cleaning, soap-making and hog-killing work—it costs so

*much to hire help.* So year after year she toils and drudges, not allowing herself the least opportunity for improving her mind, so that she may be a better guide and counsellor for her children. And very soon her fair face is faded and careworn, her temper soured, and fretful, and herself prostrated now and then by fits of illness, only to resume her wearying labor as soon as returning strength permits. And thus she yearly becomes less able to bear the burden of her increasing household duties. If the husband is a kind, considerate man, who has been taught to assist his mother in boyhood, he makes her work lighter, by carrying wood and water, amusing the children and doing numberless little things, which may seem trifling in themselves, but are of much importance in the aggregate.

"But too many men leave the wife to draw water and carry wood, and if she finds it cut *part* of the time, she considers herself fortunate—and as for the baby he thinks it is a woman's place to nurse children, so it frets and cries, or mamma must work with it on her arm, while he reads his paper or talks with his hired men.

"Well, the farm increases in value and fertility, and his labor for producing for his family becomes lighter, as he is able to hire more help; but it is an old thing, both to himself and his wife, for her to do all the housework, with what little help the elder children, if they are girls can give her; for, if they are boys they cannot work much for her; as soon as they can use a hoe they must help father; and she toils on in the same old fashion.

"And when the comfortable new house is built and nicely furnished, and her children are beginning to be a real help to her, the pale, sickly wife and mother, *lies down to die! Truly her sun goes down at noonday.*

This wife has saved, by her ceaseless, wearying toil, hundreds of dollars for her husband, and he has lost—what money is powerless to recall—the companion of his youth, the one who has walked beside him through life's most thorny paths.

"And friends say it is a mysterious Providence! Just as if God ordained that the mother should be taken from her children when they are most exposed to temptation and danger! Instead of laying it to Providence, let us remember the days spent in toil, when the weak, exhausted frame was suffering from disease, induced perhaps from over-exertion; the hours stolen from needed slumber and devoted to labor; the numberless household duties performed with a fretful infant upon her arm; the immense amount of time spent in cooking over a hot fire, and the many sleepless nights passed in anxious watching over sick children. When we look at the subject in this light, is it so very mysterious that so many women die in their prime?"

## DOMESTIC RECIPES.

**BREAD PUDDING.**—To about a double handful of stale bits and crusts of bread, pour over a quart of boiling milk to soften them, then add a quarter of a pound of butter, a salt spoon of salt, two teacups of sugar, a dessert spoon of powdered cinnamon; beat up three eggs and mix in well; a handful of currants, and the grated rind and juice of an orange. Bake in a well-greased tin pan for half an hour. If the bread crusts are very hard, soak first in boiling water, taking care to pour all off before adding the milk.

**WHITE CAKE.**—The whites of twelve eggs, five cups of flour, one cup of butter, three cups of sugar, one cup of sweet milk, one teaspoonful of soda, two teaspoonfuls of cream tartar.

**MUFFINS.**—One quart of milk, three eggs beaten separately and very light, one-half teaspoonful of salt, flour enough to make it a little thicker than ordinary batter, butter the size of an egg, and one heaping teaspoonful of soda and three of cream tartar.

**WHOLESOME BREAD.**—Stir unbolted wheat flour into cold water until as thick as common stirred cake; bake twenty minutes in a hot oven, in small tart tins; this makes a nice wholesome dish for breakfast, far preferable to buckwheat cakes. An improvement upon this, for those who like something richer, is to take a pint of milk, and four eggs well beaten, thicken with unbolted flour and bake in the same way. This is pronounced by some as the only wholesome form in which hot bread can be eaten.

**TO CLEAN GLOVES.**—Have a little milk in a saucer and a piece of common yellow soap, wrap round the forefinger a piece of flannel, and dip it into the milk, taking care not to make the flannel very wet; rub it on the yellow soap and afterwards pass it up and down the glove until all the dirt be removed.

**VOLATILE SOAP** for removing Paint, Grease Spots, &c.—Four table-spoonfuls of spirits of hartshorn, four table-spoonful of alcohol, and a table-spoonful of salt. Shake the whole well together in a bottle, and apply with sponge or brush.

**DELICIOUS LEMON PIE.**—Four eggs, two coffee cupsful of sugar, beat to a froth; the juice of two lemons, grate the yellow peel off one, rejecting the peel of the second and the pulp of both; beat all together a few moments longer. Have ready two pie pans lined with rich pastry, into which turn the above; cover with pastry, and bake an hour.

**MACASSAR OIL.**—Olive oil, one pound; oil of virginum, one drachm; oil of rosemary, one and a quarter; mix. Its tendency is to make the hair grow fast and to curl—or so it is said.



## The Florist.

### NOVEMBER BLOOMING ROSES.

One great charm attached to the Rose, is the length of time in which it may be had in bloom in the open garden, without protection of any kind. I have this day (Nov. 18,) gathered a bouquet of these charming-flows sufficiently numerous to fill a large vase, and of a quality good enough to grace a drawing-room, or I might almost say, fit for setting up in an exhibition stand. Although we have lately experienced violent gales of wind and heavy storms, many of the blooms have not a damaged petal, while the glowing color of some varieties is exquisite. The few last warm days have contributed to this result.

It is my intention to give a short, but, I trust, a useful list of varieties which can be depended on for late autumn or winter blooming, and I shall place them in their order of merit, viz :

*General Jacqueminot*.—This brilliant variety decidedly claims the foremost place; not only are blooms and buds on every plant, but the flowers not being so full as in many kinds, open much more freely, and have all the high coloring we expect to find early on a summer's morning.

*Louise Odier* is another charming rose, the color soft pink, the form good.

*Senateur Vaisse* is an excellent late bloomer; the color deeper than in the summer, but the buds being fuller of petals do not expand so freely as the General.

*Madame Charles Wood* is another acquisition; the plants with me have more blooms and buds on than they can well support. Color deeper than earlier in the season; the blooms open freely.

*Madame Knorr* is a pleasing rose, being small and pretty, but the color rather washy.

*Madame Louise Carique* is a variety which is very beautiful; the blooms open freely, and are distinct in color from any other rose, the petals being crimson and shaded with deep violet. This rose is by no means a favorite, either for exhibition or decorative purposes in the summer, but it is well worth growing, if only for its beauty in the fall.

*Madame Clemence Joigneaux* is a fine bold rose-colored variety, but too full to open freely unless the weather be dry.

*Gloire de Dijon* must not be forgotten, as its fine blooming qualities and its chaste color render it a decided acquisition; the winds and rains at this period of the year are apt to destroy its beauty.

*La Reine* is not so free as some others, yet here and there a grand bloom can be found.

*Monsieur de Montigny* is another of the *La Reine* class, but deeper in color and very showy.

*Victor Verdier* is a pleasing bright pink, and opens very freely if the weather is not wet.

*Maria Portemer* is a neat dark rose, and very free; the outer petals are apt to decay before the flowers open.

*Noemi* is very free, the flowers light pink, but small; it has the same fault as *Maria Portemer*.

*La Fontaine* is a showy rose; opens well, and keeps its color.

*Triomphe des Beaux Arts* is a free blooming kind, very dark, semi-double, but pretty, chiefly on account of its color.

*Madame Schmidt* is a fine chaste rose-colored flower, not very free, but distinct and beautiful.

*Souvenir de la Reine d'Angleterre* is another large showy rose, and opens well; color pale pink.

*Duchesse d'Orleans* produces occasionally fine blooms of a pale flesh color, which are exceedingly delicate at this season.

*Souvenir de la Malmaison* is also of a beautiful color, but the outer petals often decay before the blooms expand.

*Blanche de Solerville* is distinct from all others; the blooms are small, of a creamy white; opens well; not very double.

*Salet (Moss)* is the only Moss that opens freely, and is therefore desirable, although of a poor color.

*Bouquet de Flore* is a pretty cupped rose, deep pink, small.

*Jules Margottin* is a free bloomer, of a pleasing color, but the wind appears to damage the blooms much, giving them a very ragged appearance.

It will be borne in mind that the colors here given are as produced now, and that the varieties enumerated are those that were in bloom on the 18th day of last November.

Many other kinds could be mentioned that are beautiful in the months of September and October, but which will not come into the list of November Roses.—*Gardeners' Chronicle*.

### Sensible Maxims.

Never taste an atom when you are not hungry; it is suicidal.

Never hire servants who go in pairs, as sisters, cousins, or anything else.

Never speak of your father as "the old man."

Never reply to the epithet of a drunkard, a fool, or a fellow.

Never speak contemptuously of womankind.

Never abuse one who was once your bosom friend, however bitter now.

Never smile at the expense of your religion or your Bible.

Never stand at the corner of a street.

Never insult poverty.

Never eat between meals.

## The Household.

**HINTS FOR HOUSEKEEPERS.**—If the covers of sofas and chairs are dirty, they may be cleansed without being removed, by first washing them over with warm water and soap, rubbed over them with a flannel; then, before they are dry, sponge them over with a strong solution of salt and water, in which a small quantity of gall has been mixed. The windows of the room should be opened, so as to secure a perfect drying, and the colors and freshness of the articles will in this way be restored. Floor cloths may be cleaned with a mixture of magnesia, only milk-warm, followed by warm water in the same manner that carpets are cleaned. They should be rubbed with a dry flannel till nearly dried, then again wet over with a sponge dipped in milk, and immediately dried and rubbed with a flannel till the polish is restored. This is a process much to be preferred to that of rubbing the cloth with wax, which leaves it sticky and liable to retain dust and dirt for a long time. Very hot water should never be used in cleaning floor cloths, as it brings off the paint. Cleaning mirrors and polished steel articles is an easy operation, when rightly understood. The greatest care should be taken in cleaning a mirror, to use only the softest articles, lest the glass should be scratched. It should first be dusted with a feather brush, then washed over with a sponge dipped in spirits to remove the fly spots; after this it should be dusted with the powder blue in a muslin bag, and finally polished with an old silk handkerchief. Polished steel articles, if rubbed every morning with leather, will not become dull or rusty; but if rust has been suffered to gather, it must be immediately removed by covering the steel with sweet oil; and allowing it to remain on for two days; then sprinkle it over with finely powdered unslaked lime, and rub it with polishing leather.

**A GOOD HOUSEWIFE.**—A good housewife is one of the first blessings in the economy of life. Men put a great value upon the housewife qualifications of their partners, *after* marriage, however little they may weigh with them *before*; and there is nothing which tends more to mar the felicities of married life, than a recklessness or want of knowledge, in the new housekeeper, of the duties which belong to her station. We admire beauty, and order, and system, in everything, and we admire good fare.—If these are found in their dwelling, and are seasoned with good nature and good sense, men will seek for their chief enjoyments at home,—they will love their home and their partners, and strive to reciprocate the kind offices of duty and affection. Mothers that study the welfare of their daughters, will not fail to instruct them in the qualifications of married

life; and daughters that appreciate the value of these qualifications, will not fail to acquire them.

**TO KEEP HAMS.**—A Mr. Brooks, of Tioga county, gives a method of keeping hams which has never failed with him. He has tried them in salt, in grain, in pounded charcoal, in dry ashes and sewed up in cloth and whitewashed, but they would either mould or suffer injury some other way. He then made sacks for them of a yard square of good sheeting, putting them up before infested by flies, one in a sack. Sweet hay is cut up about an inch long, and put in the sacks, around the hams, keeping them from the bag. They are then tied up and hung up in the smokehouse, or some cool, dry place; the hay and bag well keep away the flies, and allow the escape of moisture, so that they will not mould. If well cured and thoroughly smoked, one may depend on having good hams as long as they last, or for years. The bags will last for a generation. Those who have not yet secured their hams for this season will do well to try this plan. We have no doubt of it being a complete protection against mould, taint, or insects.

**TO REGULATE A HOUSEHOLD.**—Method is necessary to a well-regulated household. Without it the work drags heavily along from Monday morning until Saturday night. Begin the week properly, keep everything in order as you go along, and the chances are fair that you will find yourself in fine condition at the end of the week. A judicious manager will never suffer her domestic affairs to become disarranged, because such a contingency involves too great an expenditure of good temper and peace in a family. You will never hear a methodical woman say—"dear me; I forgot this was wash day!" or "how forgetful I am! here we have been out of flour and sugar and coal for a day and a half, and I have never thought of mentioning it to my husband."—*Germantown Telegraph.*

**BOYS, HELP YOUR MOTHERS.**—We have seen from two to six great hearty boys sitting by the kitchen stove, toasting their feet and cracking nuts or jokes, while their mother, a slender woman, has gone to the woodpile for wood, to the well for water, or to the meat house to cut a frozen steak for dinner.—This is not as it should be. There is much work about the house too hard for women. Heavy lifting, hard extra steps which should be done by those more able. Boys, don't let your mother do it all, especially if she is a feeble woman. Dull, prosy housework is irksome enough at least. It is a long work, too, it being impossible to tell when it is quite done, and then on the morrow the whole is to be gone over with again. There is more of it than one is apt to think.



## The Dairy.

### MILCH COWS—GOOD AND POOR.

A good cow is one adapted to the kind of agriculture that prevails where the cowin question is kept. Many of our readers value a cow only because she bears them a good healthy calf every spring, suckles it a few months, exercises a cow-discretion in not straying from the herd nor wandering away from its usual haunts; whether she gives four quarts of milk a day or twenty, it matters not, provided her calf has enough. This estimate of a cow prevails wherever young or beef cattle are the only salable products of the herd. There are many more who value a reasonable amount of milk and make use of it to a considerable extent in making butter and cheese for home use, and perhaps for sale, with whom the cow's chief value is to multiply the race.

As we come toward the net-work of railroads and canals, which cover great sections of our country, and place the agricultural regions in such close commercial relations with the great markets, we find milking qualities more and more valued, so that in the great butter and cheese regions, and especially among the milk dairies it becomes the only valued product. The calves are knocked in the head at birth, and their skins only saved. The only ones that escape this fate are the heifer calves of famous milkers; and though it by no means follows that these take after their dams in milking qualities, but oftener perhaps, *after the dam of their sires*, there are yet notable instances of close resemblance in all respects between famous old milkers and their heifer calves which has run through many generations of cows and almost of men.

We can expect to raise good milkers only by breeding from bulls that have come of excellent cows—very queens of the milk pail. These are to be found among the breeds famous for milking—the Ayrshires and Jerseys—or among certain strains of Devons, which often exhibit excellent milking qualities. The only admissible excuse for anybody's breeding from grade or common blood bulls, is that they are used to perpetuate if possible the extraordinary milking qualities of their dams. The influence of the dam on her offspring as regards milk production, is a subject upon which agriculturists need more light. Select calves for rearing from the best milkers, but invariably use bulls from good milch stock.

When the question with the dairyman is how to get a stock of cows that will give him the best returns in milk from a given quantity of feed—we say go about the country and select the best cows you

can find without reference to anything but soundness, age and milking qualities—(*quantity and richness*—one, the other, or both). If it be desirable to develop the milking qualities of heifers, without regard to the other points—let them become mothers early—milk them thrice in a day, stripping each time very clean—feed succulent and rich fodder, and while the animal is still growing, in every way promote a strong tendency to milking production. —*Ohio. "Farmer's Home."*

**IMPROVEMENT OF SANDY SOILS.**—On light sandy soil that is liable to suffer from drouth, a compost of half muck and half barnyard manure can be applied to great advantage. Now is the time to throw up the muck while the swamps are dry. Thirty loads of such a compost per acre will greatly improve such land, rendering it more retentive of moisture and promoting a more vigorous growth of vegetables.—*Gen. Eur.*

### BREAKING OXEN.

The editor of the Massachusetts *Farmer* recommends the following method of breaking oxen:

"When you first put a yoke on your two-year old steers, coax them with an apple or a ear of soft corn, (soft corn is allowable in this case). Then they will hold up their heads and be glad to follow you. No whip will be needed at the first yoking. Let the yoke and the soft corn be associated in their minds, and they will never be shy of the yoke; but if you make use of force alone, they will hold down their heads to keep them from the blows. After you have taught them to follow you around in the yoke, and that it will not injure them to carry it you can hitch them on before the older oxen, and make them take the lead. The driver should go beside them occasionally with a switch, stick or a light and short whip, but he will not have any need to beat them, except in extreme cases."

**BEE ROBBERING.**—When bees are robbing, close the entrance so nearly that but one bee at a time can escape. At sundown remove the hive to a secure place well darkened, and kept there for a week.—This will get the robber bees used to the new neighbors, and they will work and remain with them.—This should be done only when the swarm is overcome by the robbing bees. Otherwise leave the swarm on the stand, with the entrance hole nearly closed. In such a condition they will fight their way through.

**THOUGHTS.**—Unspoken thoughts are virgins. They must be wedded to words ere they can attain perfect existence; and once united, they live and bear fruit forever. No decree can divorce them.

# PATENT CLAIMS

ISSUED FROM THE U. S. PATENT OFFICE,  
(APPERTAINING TO AGRICULTURE.)  
From the 5th July, to September 6th, 1864.  
FROM THE "AMERICAN ARTISAN."

- 43,470.—Cultivator.—Frank Barney, Bloomington, Ill.  
43,472.—Sorghum Evaporator.—Caleb Bond, Richmond, Indiana.  
43,478.—Grain Separator.—Jacob Clum, Shelby, N. Y., and George A. Fisher, N. Y.  
43,480.—Hay Press.—G. W. D. Culp, Allensville, Ind.  
43,481.—Mode of Baling Hay and other Materials.—Edward Dorr, Rockford, Ill.  
43,487.—Corn Harvester.—Bottis M. Fowler, Brooklyn, New York.  
43,500.—Harrow Teeth.—E. N. Higley, Luke Village, N. H.  
43,502.—Pump.—Benj. J. C. Howe, Syracuse, N. Y.  
43,509.—Apparatus for Clarifying Cane-Juice.—William A. Jordan, New Orleans, La.  
43,513.—Churn.—Patrick Killin, Mount Healthy, Ohio.  
43,519.—Grain Shovel.—B. E. Miles, Washington, Ill.  
43,525.—Harvester.—J. B. Pressey, Dubuque County, Iowa.  
M. A. Wheaton, Suisun City, Cal., and D. Sheets, Pike County, Mo.  
43,537.—Apple-parer.—John Voab, Penn Yan, N. Y.  
43,542.—Farm Fence.—E. W. Woodward, Wash'n D. C.  
43,543.—Field Fence.—Wm. J. Young, Le Roy, N. Y.  
43,534.—Cultivator.—James Canfield, Sabula, Iowa.  
43,539.—Fertilizer.—Wm. H. L. Glover, New York City.  
43,547.—Cleaning Wool.—Frederick M. Rhschaupt and J. George Perzel, N. Y. City.  
43,552.—Hay-Elevating Fork.—T. T. Calkins and D. E. Wing, Cossackie, N. Y.  
43,556.—Cultivator.—John Cox and John A. Throp, Three Rivers, Mich.  
43,557.—Meat and Vegetable Cutter and Grtaer.—Ephraim Culver, Shelburne, Mass.  
43,563.—Equalizing the Temperature of Milk.—S. Perry, Newport, N. Y.  
43,564.—Pea-sheller.—G. B. Price, Watervliet, N. Y.  
43,561.—Cultivator.—D. M. Davis, Asbury, Ill.  
43,563.—Calf-feeder.—Wm. C. Dodge, Washington, D. C.  
43,513.—Rotating Plow.—John Hoadley, Zanesville, Ohio.  
43,525.—Derrick for Stacking Hay.—T. G. Palmer, Greenville, N. Y.  
43,536.—Derrick for Stacking Hay.—S. Turner, Onorgo, Ill.  
43,539.—Hay-elevating Fork.—J. A. Whitney, Maryland, N. Y.  
43,541.—Sawing Wood by Wind-power.—J. Wisner, East Aurora, N. Y.  
43,542.—Road-scraper.—J. B. Wood, Swansea, Mass.  
43,546.—Hay-elevating Fork.—John B. Hawley, Albany, N. Y.  
43,555.—Apple-parer.—E. L. Pratt, Boston, Mass.  
43,556.—Peach-parer.—E. L. Pratt, Boston, Mass.  
43,564.—Machine for Loading Hay.—J. B. Atwater, Chicago, Ill.  
43,566.—Water Elevator.—H. J. Bailey and S. S. Williams, Pittsburg, Pa.  
43,568.—Corn Planter.—J. H. Broad, Lodi, N. Y.  
43,571.—Threshing Machine.—L. N. Clark, Brighton, Mich.  
43,573.—Apple Bin.—S. S. Cole and G. W. Cole, Canton, Ill.  
43,574.—Fruit Basket.—Chas. Crozat Converse, Dubuque, Iowa.  
43,578.—Plow.—John Dement, Dixon, Ill.  
43,580.—Hay-Rake.—S. Eberly, Mechanicsburg, Pa.  
43,588.—Hay and Straw Cutter.—Thomas Hazard, Wilmington, Ohio.  
43,590.—Apple Parer.—S. S. Hersey, Farmington, Maine.  
43,595.—Combined Seeder and Cultivator.—Wm. Ironsides, Jennerville, Pa.  
43,596.—Knife for Nurserymen.—S. S. Jackson, Cincinnati, Ohio.  
44,011.—Grain Separator.—F. H. C. Mey, Buffalo, N. Y.  
44,019.—Corn Planter.—James Selby, Peoria, Ill.  
44,020.—Horse-Rake.—A. J. Shunk, Shanesville, Ohio.  
44,021.—Hog-Cleaning Machine.—N. Silverthorn, Prescott, Wis.  
44,032.—Hoe and Seed Planter.—Charles H. Wolcott, Randolph, N. Y.  
44,035.—Weeding Hoe.—Aaron B. Adams, Westport, Conn.  
44,042.—Straw Cutter.—W. P. Goodman, Indianapolis, Ind.  
44,044.—Fruit-Paring Machine.—W. M'Howland, Leominster, Mass.  
44,064.—Harvester.—George Bailey, Wiscotta, Iowa.  
44,077.—Steam Plow.—James Curtis, Chicago, Ill.  
44,079.—Horse Rake.—Moses Davenport, Minerva, Ohio.

- 44,084.—Harvester.—Daniel L. Emerson, Rockford, Ill.  
43,086.—Horse Hay-Fork.—Silas L. Gates, Verona, N. Y.  
44,096.—Cider Mill.—Samuel G. Hurlburt, Cleveland, O.  
44,098.—Seed Drill.—John F. Keller, Greencastle, Pa.  
44,102.—Horse Hay-Fork.—David Lippy, and J. H. Palm, Mansfield, Ohio.  
44,103.—Machine for planting Potatoes.—Tobias Marcus, Washington, D. C.  
44,116.—Horse Hay-Fork.—John L. Ripley, Fremont, O.  
44,129.—Hay Elevator.—E. L. Walker, Benford's Store, Pa.  
44,131.—Tree Protector.—Cyrus H. Whitlock, Whiting, Vt.  
44,135.—Sorghum Evaporator.—Levi Wright, Wapella, Ill.  
44,136.—Hominy Mill.—Warren Wright, Springfield, O.  
44,138.—Machine for dressing Flax and Hemp.—C. G. Howard, assignor to himself and E. A. Gooftell, Topeka, Ka.  
44,139.—Binding Attachment to Harvester.—Jacob Behel, and Wheeler Hedges, assignors to said J. Behel, Earlville, Ill.  
44,147.—Manufacture of Manure.—Alfred Francoise, Moselman, Paris, France.

TO PRESERVE CUCUMBERS FOR PICKLING.—Cut the cucumbers from off the vines without bruising the stems; lay them carefully in a basket; take them to a cellar; sort and pack them in barrels, putting different sizes in separate barrels; spread a layer of salt between each layer of cucumbers; there should be sufficiently salt to entirely cover the pickles between the layers. Continue to pack the cucumbers daily as they are picked, never using any but fine cucumbers, discarding all that are crooked or of slow growth. Keep boards over the pickles, and weight to press them under the brine, which will be formed without the addition of water, with the juice extracted from the fruit by the salt. Pickles packed in this manner may be preserved for years, if there is no impurities in the salt; but if the salt is mixed with lime, they will soften and spoil.

RECIPE FOR KEEPING CIDER SWEET.—The following receipt is said to be a very certain way to keep cider sweet for two or three years:

Put new cider in clean barrels, let it ferment one to three weeks, according as the weather is cool or hot. When lively fermenting, add to each gallon three quarters of a pound of white sugar, and let the whole ferment until it possesses nearly the brisk taste desirable. Pour out a quart of Cider, and mix with it one quarter ounce of Sulphate of Lime for every gallon. Still well, and pour into the casks. Shake the barrel a few minutes, and let it settle. Bottle in the course of a few weeks, or let it remain on draft.

THE WAY ITALIAN PEASANTS EAT.—The traveler, in passing along the fields of Italy in the morning, will see a kettle of Indian meal and water boiling over a fire in the field. When the mush is cooked it is poured out upon a large flat stone, when the men, women and children gather around it, and take it up in their hands and eat it. At noon you will see the same process, and again at night. At first there was a prejudice against American corn, as they call it, but now it is almost the only article of food among them.